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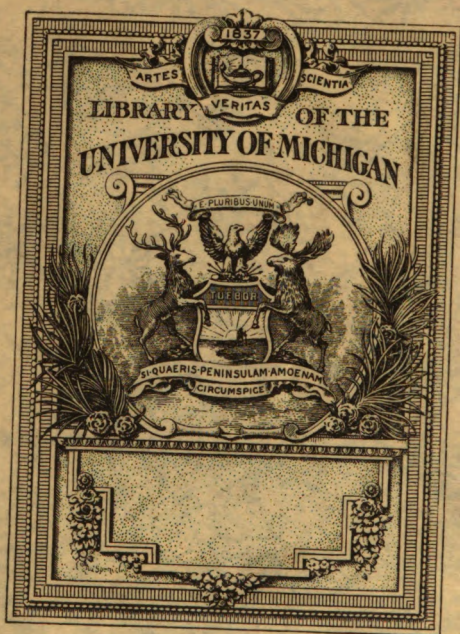
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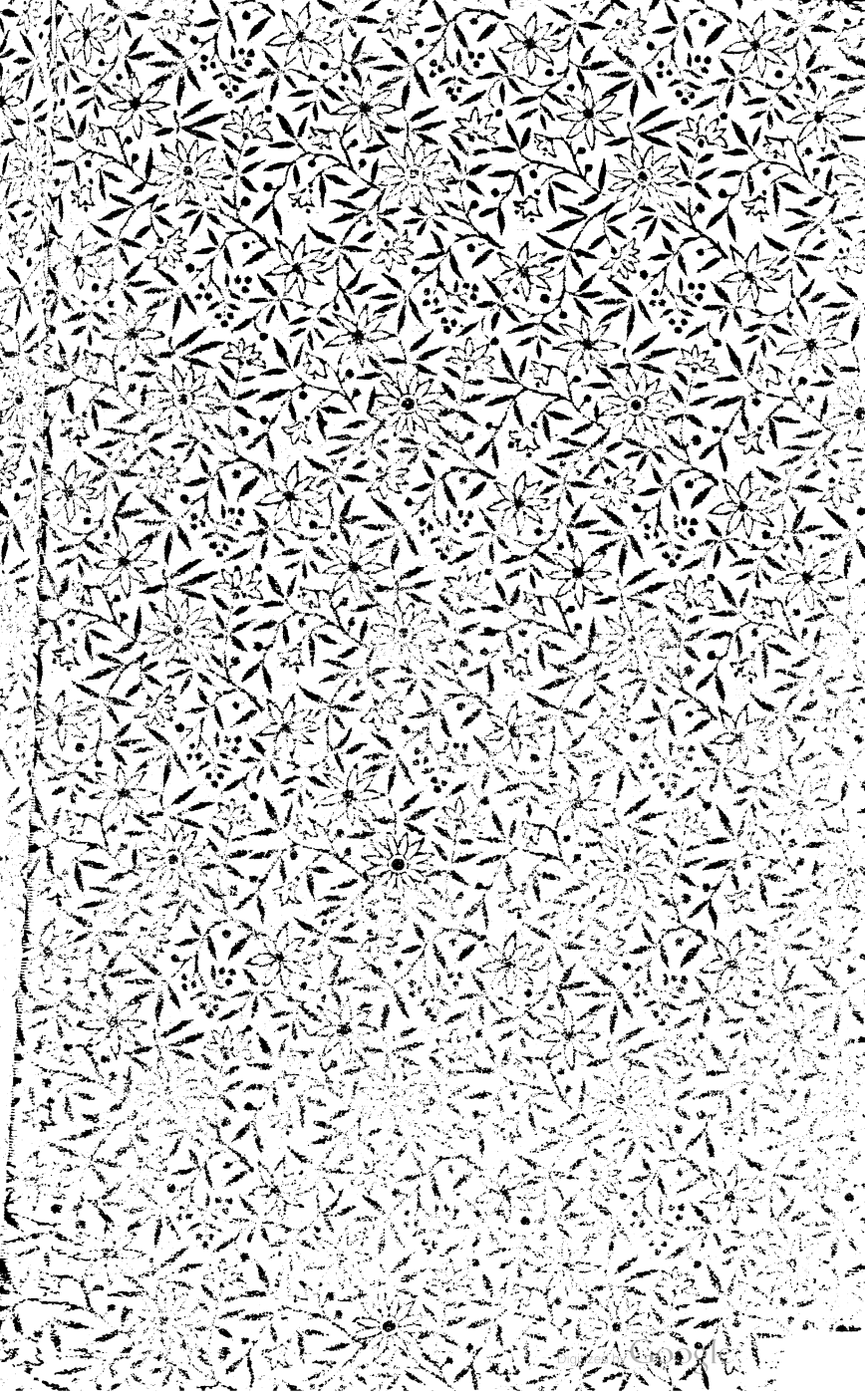
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FIFTY-FOURTH
ANNUAL MEETING

OF THE

62402

American Institute of Instruction.

Lectures, Discussions, and Proceedings.

WHITE MOUNTAINS, N. H., JULY 11-13, 1883.

Published by order of the Board of Directors.

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1884.

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BY
AMERICAN INSTITUTE OF INSTRUCTION.

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PREFACE.

THIS volume contains an abstract of the proceedings of THE AMERICAN INSTITUTE OF INSTRUCTION for 1883, together with the several lectures and discussions in full, or in condensed form as reported. The subjects treated embrace School Supervision, its present condition and needs; the relations of the several grades of schools necessary to be maintained and the kind of instruction requisite to a complete education. It is to be regretted that more full and accurate reports were not preserved of some of the valuable addresses, especially of those of Dr. Henry Barnard, Presidents Buckham and Seelye, Mrs. Livermore, and Colonel Parker. The volume is, however, a valuable contribution to the educational literature of the current year, and will hold a high rank in the series of annual volumes, now numbering over fifty, of which it forms one.

By a mutual understanding between the officers of the AMERICAN INSTITUTE and the NATIONAL TEACHERS' ASSOCIATION, these two educational associations were held in succession during the same week. The meetings of the National Association being held at Saratoga, N. Y., it was possible by this arrangement for members of both associations to be present at both meetings. With the accessions from the National, and the attendance from various parts of New England, the membership considerably exceeded one thousand.

The above arrangement resulted in securing a large assemblage of eminent educators from various parts of the country, and thus afforded an opportunity for social intercourse, and the comparison of views—important ends to secure in popular educational gatherings. Yet something was sacrificed—the time of the Institute session was so abridged, that the Institute was deprived of discussions, which, had there been time, must have proved

exceedingly valuable ; but for which, after engagements had been made with a view to holding a three days' meeting, it was not possible to provide.

But even with the slight inconveniences incident to a crowded programme, the meeting proved to be both entertaining and profitable. To these results, the proprietors of the famous mountain hotels, and the officers of the several New England and connecting railroads, made most liberal contributions.

"THE APPLICATION OF THE PRINCIPLES OF PSYCHOLOGY TO THE WORK OF TEACHING," is the title of an essay which received the prize from the income of the Bicknell Fund. This prize essay is published as an appendix to the proceedings of the Institute, also in a separate volume, in the expectation that it will have the wide circulation which it merits.

With this volume, the original plan of issuing the proceedings through a regular publisher has been resumed. Very favorable terms for its publication have been made with Mr. Willard Small, of Boston, who will hereafter be prepared to furnish all published proceedings of the American Institute that are in print.

This volume has been prepared by the undersigned, appointed by the board of Directors, a Committee on Printing.

GEORGE A. WALTON,
R. C. METCALF,
JAMES ~~M~~ WEBSTER,
HOMER B. SPRAGUE.

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AMERICAN INSTITUTE OF INSTRUCTION.

Fifty-Fourth Annual Meeting,

JULY 11, 12, AND 13, 1883.

JOURNAL OF PROCEEDINGS.

FIRST DAY.—WEDNESDAY AFTERNOON, JULY 11.

THE fifty-fourth annual meeting of the American Institute of Instruction commenced in the pavilion north of the Fabyan House, White Mountains, on Wednesday, July 11, 1883, at 2.30 o'clock, p. m., and was called to order by the President, George A. Walton, A. M., who briefly welcomed the members.

Rev. Dr. Withrow, of Park Street Congregational Church, Boston, offered prayer.

The Institute at once proceeded to the consideration of the first question on the programme, viz. : "*How can the common schools be improved?*"

The first speaker was Hon. T. B. Stockwell, State Commissioner of Education, Providence, R. I. (See Lectures.)

George H. Martin, A. M., of Bridgewater, Mass., opened the discussion on the above paper.

The President then read a letter from Miss Lucy H. Garlin, leader of Euterpe Quartette, stating that from the sudden illness of the second alto, it was impossible to carry out the arrangements that had been made for

singing by the quartette, a performance by which was in order at this point. In place thereof, Prof. John Matteson, Professor of Elocution in the Graylock Institute, at South Williamstown, Mass., was introduced, and read with much acceptance, a selection from "John Brandt," by Theodore Winthrop, entitled "The Gallop of Three."

The next business in order was the report of the Committee on "Industrial Education." A paper was presented and read by the chairman of this committee, Prof. J. D. Runkle, of the Institute of Technology, of Boston. (See Lectures.)

Recess until 7.45 o'clock, P. M.

EVENING SESSION.

The Institute re-assembled at 7.45 o'clock, P. M.

A paper was read upon "The Demand for High Schools in a system of Public Education," by Col. Homer B. Sprague, Principal of the Girls' High School, of Boston. (See Lectures.)

The evening exercises were concluded with readings by Prof. J. E. Murdock, of Cincinnati, Ohio. His selections comprised: "Drifting, a Poet's Reverie," "Patriot Uprising of 1776," "Sennacherib," by Byron, "Job Trotter's and Samuel Weller's Contest of Wit and Humor," from Pickwick Papers. The readings gave great pleasure to the audience, and called forth frequent applause.

SECOND DAY.—THURSDAY MORNING, JULY 12.

The Institute re-assembled at 9.30 A. M., and was opened with prayer by Rev. Dr. Withrow.

The President announced the following committees, which were confirmed by the convention :—

Committee on Nominations. — A. G. Boyden, Mass.; William A. Mowry, R. I.; B. G. Northrop, Conn.; J. H. Hanson, Me.; C. C. Rounds, N. H.; Edward Conant, Vt.

On Resolutions. — I. N. Carlton, Conn.; T. B. Stockwell, R. I.; G. T. Fletcher, Me.; A. B. Meservey, N. H.; M. H. Buckham, Vt.; D. B. Hagar, Mass.

On Necrology. — Charles Northend, Conn.; R. Woodbury, Me.; James W. Webster, Mass.; Justus Dartt, Vt.; Merrick Lyon, R. I.; C. C. Rounds, N. H.

On Teachers and Teachers' Places. — H. E. Sawyer, Conn.; Francis Cogswell, Mass.; G. T. Fletcher, Me.

The President then read his annual address. (See Lectures.)

The first subject for consideration as prescribed in the programme of exercises for this morning's session, was "School Supervision."

The President introduced as the essayist on this subject, Hon. Henry Barnard, LL.D., of Hartford, Conn.,—referring to the fact that this gentleman had given one of the first addresses ever made in this country upon this subject. Mr. Barnard, on coming forward, was received with hearty applause. He read a paper entitled, "A Brief History of School Supervision," concluding, at the request of Gen. Eaton, with interesting and valuable personal reminiscences.

The next topic considered by the Institute, was "The Present Condition and Needs of School Supervision in New England." (Ten-minute addresses.)

The first address was made by L. G. Jordan, A. M., President of the Maine Pedagogical Association, Lewiston, Maine.

At this point the exercises were varied by singing by

Mrs. Alice J. Osborne, accompanied by Mr. T. W. Bancroft, tenor ; Mrs. O. B. Bruce presiding at the piano. The performance gave great enjoyment to the audience, and was encored.

The next speaker was Prof. A. E. Leavenworth, Principal of the Normal School, Castleton, Vermont, who was followed by S. T. Dutton, A. M., Superintendent of Schools, New Haven, Conn., and Mr. H. P. Warren, recently of the State of New Hampshire. The speakers gave their views upon the supervision needed for their respective States. (See Lectures.)

Dr. A. P. Stone, of Springfield, Mass., then read a paper entitled, "Duties of School Superintendents." (See Lectures.)

It was then voted, That the President appoint a committee to recommend such action, in the form of a resolution, as they may deem advisable, on the demands for supervision in New England.

Recess until 2.30 o'clock, P. M.

AFTERNOON SESSION.

The President announced as a committee to draft a resolution in relation to the supervision of schools, as provided in the vote passed at the morning session : —

Messrs. A. P. Stone, of Massachusetts ; T. B. Stockwell, of Rhode Island ; D. N. Camp, of Connecticut ; G. T. Fletcher, of Maine ; H. P. Warren, of New Hampshire ; and M. H. Buckham, of Vermont.

The first topic for consideration for the afternoon was "The Relation of the College to the Common Schools."

The first paper on this subject was read by M. H. Buckham, LL.D., President of the University of Vermont. (See Lectures.)

The second paper on the foregoing subject was read by Dr. William T. Harris, of Concord, Mass. (See Lectures.)

These papers were followed by a discussion participated in by Dr. E. E. White, of Indiana, Prof. Soldan, of St. Louis, and Dr. Mowry, of Providence, R. I.

At this point a motion was made that the Institute now attend to the report of the Committee on the Prize Essay, for the Bicknell Fund. Mr. Stockwell from that committee reported that thirty essays upon the subject assigned, namely, "On the Application of the Principles of Psychology to the Work of Teaching," had been received; that these essays had been examined by a Committee of Award, consisting of J. W. Dickinson, Mrs. E. N. L. Walton, and George H. Martin, and that said committee reported that the one signed "Mustard Seed" merited the prize. The committee had opened the sealed envelope, which accompanied the essay, and found that the writer was Prof. W. N. Haileman, of Detroit, Michigan. The committee, therefore, would present the essay to the Institute for its ownership and use. (See Appendix to this volume.)

Mrs. E. N. L. Walton upon invitation then read portions of the essay to the Institute.

The exercises of the afternoon were closed by readings by Prof. Murdock. The selections included Longfellow's "Building of the Ship," and Dr. Holmes' "One-Hoss Shay."

Adjourned to 7.45 o'clock, P. M.

EVENING SESSION.

The evening session was opened by singing and readings.

The address of the evening was then given by Mrs. Mary A. Livermore, of Melrose, Mass., entitled, "The Dream of To-Morrow." It was listened to with most profound attention and interest.

THIRD DAY. — FRIDAY MORNING, JULY 13.

The Institute re-assembled at 9.45, the President in the chair. Rev. A. E. Winship, of Somerville, Mass., opened the session with prayer. A business meeting having been announced for this hour, Gen. John Eaton, United States Commissioner of Education, offered the following Resolution: —

That this Institute invite Dr. Barnard to write out his personal experience in education, yesterday related, of so great value to educators, and that a committee of five, of which the Honorable President shall be one, be appointed to co-operate with Dr. Barnard in carrying out this resolution. [Adopted.] The committee appointed were John Eaton, Noah Porter, T. B. Stockwell, Chas. Northend, G. A. Walton.

Mr. H. P. Warren introduced a resolution of sympathy for Mr. Joseph E. Dodge, Superintendent of the railroad passing through Fabyan's, on account of the severe illness by which he was prostrated.

Resolved, That we hear with regret, that our long-time friend, Mr. Joseph E. Dodge, is confined to his home by illness. We remember with a deep sense of obligation his efforts to minister to our happiness, on the several occasions when we have met in the White Mountains. We have missed his kindly presence on this occasion, and sincerely hope we may welcome him to our gathering another year.

On motion it was ordered that the resolution be put in the form of a letter, and sent to Mr. Dodge immediately.

Mr. Daniells, of Boston, made a motion that the Board of Directors be empowered to employ a clerk, for such time and at such rate of compensation as shall in their judgment be necessary and desirable. [Adopted.]

The next business in order was the election of officers for the ensuing year.

Mr. Boyden, the Chairman of the Committee on Nominations, presented its report. He said it was the earnest desire of the committee to report again for President of the Association the name of the present President, Mr. Walton; but that he had declined re-election.

The report was accepted, and on motion of Dr. Mowry, the Secretary was requested to cast the ballot, which was done accordingly, and the President declared the following persons duly elected to the several offices for the ensuing year.

President. — Homer B. Sprague, Boston, Mass.

Vice-Presidents. — Henry Barnard, Hartford, Conn.; Henry K. Oliver, North Andover, Mass.; Ariel Parish, New Haven, Conn.; John D. Philbrick, Asylum Station, Mass.; Hiram Orcutt, Boston, Mass.; Chas. Northend, New Britain, Conn.; Merrick Lyon, Providence, R. I.; Thomas W. Bicknell, Boston, Mass.; C. C. Rounds, Farmington, Me.; A. P. Stone, Springfield, Mass.; John Eaton, Washington, D. C.; B. G. Northrop, Clinton, Conn.; T. B. Stockwell, Providence, R. I.; D. N. Camp, New Britain, Conn.; J. W. Dickinson, Boston, Mass.; D. W. Jones, Roxbury, Mass.; D. B. Hagar, Salem, Mass.; Daniel Leach, Providence, R. I.; Albert G. Boyden, Bridgewater, Mass.; E. A. Hubbard, Hatfield, Mass.; J. H. Hanson, Waterville, Me.; M. H. Buckham, Burlington, Vt.; G. I. Cummings, Worcester, Mass.; J. L. M. Curry, Richmond, Va.; A. D. Mayo, Boston, Mass.; Edward Conant, Castleton, Vt.; Sarah E. Doyle, Providence, R. I.; Celesta E. Bush, New Britain, Conn.; W. J. Corthell, Gorham, Me.; August

tus Morse, Hartford, Conn.; Albert Harkness, Providence, R. I.; Charles P. Rugg, New Bedford, Mass.; W. E. Eaton, Charlestown, Mass.; H. F. Tuller, Worcester, Mass.; Edwin P. Seaver, Boston, Mass.; D. W. Hoyt, Providence, R. I.; William T. Harris, Concord, Mass.; William E. Sheldon, West Newton, Mass.; George H. Martin, Bridgewater, Mass.; J. M. Sawin, Providence, R. I.; H. W. Willard, Saxon's River, Vermont; W. T. Peck, Providence, R. I.; Justus Dartt, Montpelier, Vt.; John T. Prince, Waltham, Mass.; H. C. Hardon, South Boston, Mass.; R. Woodbury, Castine, Me.; F. F. Barrows, Hartford, Conn.; L. W. Russell, Providence, R. I.; S. W. Mason, Boston, Mass.; F. D. Blakeslee, East Greenwich, R. I.; Ellen Hyde, Framingham, Mass.; Juda Dana, Castleton, Vt.; J. G. Scott, Westfield, Mass.; A. W. Edson, West Randolph, Vt.; H. P. Warren, N. J.; Elbridge Smith, Dorchester, Mass.; E. S. Ball, Westerly, R. I.; J. D. Bartley, Bridgeport, Conn.; H. M. Harrington, Bridgeport, Conn.; J. F. Blackington, East Boston, Mass.; H. E. Sawyer, New Britain, Conn.; J. W. Patterson, Concord, N. H.; George T. Littlefield, Charlestown, Mass.; I. N. Carlton, New Britain, Conn., Larkin Dunton, Boston, Mass.; George A. Littlefield, Newport, R. I.; George T. Fletcher, Augusta, Me.; James A. Page, Boston, Mass.; A. D. Small, Boston, Mass.

Secretary.—Robert C. Metcalf, Winchester, Mass.

Assistant Secretary.—George E. Church, Providence, R. I.

Treasurer.—James W. Webster, Boston, Mass.

Assistant Treasurer.—J. Milton Hall, Providence, R. I.

Councillors.—George A. Walton, West Newton, Mass.; William A. Mowry, Providence, R. I.; B. F. Tweed, Cambridgeport, Mass.; M. G. Daniel, Roxbury, Mass.; John Kneeland, Roxbury, Mass.; A. J. Manchester, Providence, R. I.; A. P. Marble, Worcester, Mass.; J. S. Barrell, Cambridgeport, Mass.; J. C. Greenough, Providence, R. I.; E. R. Ruggles, Hanover, N. H.; W. H. Lambert, Malden, Mass.; Frank A. Hill, Chelsea, Mass.

The President then called upon Dr. T. W. Bicknell, President-elect of the National Teachers' Educational Association, to make a statement concerning the work of that body. Remarks were also made by Dr. Hagar, Dr. Lyon, and Gen. John Eaton.

The next business was the report of the Committee on Necrology, which was presented by Charles Northend, A. M., of New Britain, Conn. (See Appendix to this volume.)

The persons who had deceased during the year were William P. Goldthwaite, Samuel S. Green, J.L.D., George W. Greene, LL.D., and Paul A. Chadbourne, D.D., LL.D.

The President then called upon the Chairman of the Committee on the School Supervision Resolutions, to present its Report. The Resolutions were as follows :

Whereas, Reason and experience both prove that in all human affairs in the pursuit of which many persons are employed, honesty and efficiency of action can be secured only by the direction of one controlling mind, and

As the experience of all countries and communities have found this direction to be especially necessary in educational affairs, and

As the public schools, determining as they do the character of the citizen and the State, are the most important institutions which a community is called to organize and sustain, therefore,

Resolved, That the public education of children in every community requires that persons who are learned in the order and processes of human development, and the science and art of teaching, and who are skilled in the practice of the art, should be employed to act as superintendents of all public educational institutions.

Resolved, That the urgent need of our New England schools is the addition to our school authorities of skilled agents, who, acting as superintendents, shall devote their time and their skill to organizing and directing the schools in their work of public instruction, and that all friends of education and educators, and all legislators should co-operate in initiating, planning, and establishing a system of school management, which shall include a complete, thorough, and efficient public school supervision.

Dr. E. E. White, of Lafayette, Ind., by invitation, then addressed the Institute. (See Lectures.)

Remarks upon Dr. White's paper were made by Gen. Eaton.

A vote was then taken upon the resolutions reported by the Committee on Supervision, and they were adopted.

Mr. I. N. Carleton, of New Britain, Conn., then presented the Report of the Committee on Resolutions, which were adopted as follows :—

Resolved, That we observe with interest the increase of intelligent public sentiment in favor of national aid to education, and that we renew our request to Congress for the speedy passage of some fit and adequate measure in this behalf.

Resolved, That the progress of education is illustrating to us as educators the need of the National Bureau of Education, and that we find in its reports and other publications increasing value as aids in conducting the best system of instruction for the children of the country, and that we will use our best efforts to secure for it adequate means for the prosecution of its inquiries and the circulation of its publications.

Resolved, That we express to the Secretary of the Interior and Commissioner of Indian Affairs, our gratification at the increased efforts for the education of Indians, especially as we learn of it at Hampton, Va., Carlisle, Penn., and Forest Grove, Or.; and that we as teachers and educators extend to these officers the assurance of our hearty co-operation in their endeavors to secure proper education for all Indian children.

Resolved, That the members of this Association, having had the privilege of listening once more to words of rich experience and ripe wisdom from Hon. Henry Barnard, of Conn., who forty-five years ago was a pioneer, and has ever since been a leader in educational progress, are moved to express their sense of deep obligation, and that of the whole country, to Dr. Barnard for the ability, energy, and self-sacrificing devotion which have characterized his eminent and life-long services to the cause of education.

Resolutions were adopted expressing the thanks of the Institute to Messrs. Barron, Merrill & Barron, pro-

prietors of the famous hotels in the vicinity of the Institute Pavilion, for substantial assistance to the Institute, and for their untiring devotion to the members, their guests; to the several railroads throughout New England and elsewhere, for the unusual courtesies extended to the Institute, and to those in attendance; to the officers for conducting to a successful termination the large and important meeting; to the several speakers and lecturers, readers, and singers, whose exercises had contributed to the success of the meeting. A special resolution was also passed expressing the high appreciation of the labors of the retiring President, and regrets that on account of the exacting claims of his official duties elsewhere, he had felt compelled to decline the office for another year.

The next item in the programme of the morning exercises, was an address upon the effects of bad methods of teaching, by Col. Francis W. Parker, Principal of the Cook County Normal School, Chicago, Ill.

Recess until 2 o'clock, P. M.

AFTERNOON SESSION.

The Institute re-assembled at 2 o'clock, and the exercises commenced with a performance upon the piano, by Mrs. O. B. Bruce, and singing by Mrs. Alice J. Osborne, who rendered very finely the song "If I were a Voice."

Julius H. Seelye, D.D., LL.D., President of Amherst College, then delivered an address upon "The Education we Need." (See Lectures.)

The President. Hon. J. W. Dickinson, Secretary of the Massachusetts Board of Education, who was announced to read a paper at this point, is necessarily

absent in consequence of a serious accident which befell him in the early part of the Spring. Rev. A. A. Miner, D.D., of Boston, a member of the Massachusetts State Board of Education, we shall have the pleasure of hearing at a later period in the exercises.

The Institute was then entertained by readings by Prof James E. Murdock, of Cincinnati. The selections included a Recitation from Whittier's *Tent on the Beach*, "*Rivermouth Rocks*," and passages from Shakespeare, illustrating the progress of the melancholy Dane towards suicide.

The next item in the programme was a paper by Miss Ellen Hyde, Principal of the State Normal School, Framingham, Mass., subject, "*Character, the End of Education.*" (See Lectures.)

The papers of the afternoon were discussed by Rev. A. A. Miner, D.D., of Boston, Mass., and by Dr. E. E. White, of Lafayette, Ind.

EVENING SESSION.

After singing by Mrs. Bruce, Mrs. Osborne, and Mr. Bancroft, the exercises of the closing session of the Institute were successfully carried out with short addresses by representative men from the different States. Addresses were made by G. T. Fletcher, of Maine; Dr. Baldwin, of Texas; B. G. Northrop, of Connecticut; Prof. Dibble, of South Carolina; Hon. J. W. Patterson, of New Hampshire; Gen. John Eaton, of Washington, D. C.; Wm. Mather, England; Wm. A. Mowry, R. I.

Following these exercises the retiring President thanked the members of the Institute for their hearty co-operation with the officers in their effort to give success to this Fifty-fourth Annual Meeting. He could at

least congratulate the Institute upon this meeting as a financial success; he trusted it would in other more important respects hold rank with some of its distinguished predecessors.

He then called upon Dr. Mowry to escort the President-elect, Col. Homer B. Sprague, to the chair. This Dr. Mowry did, accompanying the presentation of President-elect Sprague with felicitous remarks complimentary to both the retiring and the incoming President.

In a few congratulatory words by President Walton, and the presentation of the gavel as the emblem of authority, the President-elect was initiated, and introduced to the Institute.

Col. Sprague made an appropriate address, and called upon the audience to rise and sing Old Hundred, with which the Institute adjourned.

LECTURES AND ADDRESSES

DELIVERED BEFORE THE

American Institute of Instruction,

JULY, 1883.

I.

PRESIDENT'S ADDRESS.

BY GEORGE A. WALTON, A. M., OF MASSACHUSETTS.

FRIENDS AND FELLOW-TEACHERS, MEMBERS OF THE AMERICAN INSTITUTE OF INSTRUCTION :— I bid you welcome to this Fifty-fourth Annual Meeting of the Institute. Welcome to this Institute Pavilion erected in 1879, for our special accommodation. Welcome to these celebrated hotels, tastefully beautified for your occupation, with their abundant larders and their landlords and ladies who know how to keep hotels ; eat well, sleep well under their hospitable roofs. “Go forth under the open sky, list to nature’s teachings,” and with the psalmist lift up your eyes to the hills, these grand old hills — look upon them at morning and gird yourself for duty ; look upon them at evening, when their blush is upon them ; find time before you leave to climb to their summits ; stay over night and go to Tuckerman’s Ravine in the morning :— descend to the Glen House ; go to Glen Station, through the Notch, by Crawford’s to Fabyan’s ; look upon the Presidential range from Jefferson ; go to Twin Mountain, to Bethlehem, to the Profile, to the Pool, and the Flume, and there see what the elements of Nature unrestrained can do,—nay, it would seem, have done to give us a new surprise. And after our meetings are over, take some one of the advertised excursions, —you’ll never regret it ; Montreal, Quebec,

Haha Bay, Ausable Chasm and the Thousand Islands invite you ; Mt. Desert beckons to her craggy shores.

And while here don't wait to be introduced, but salute everybody you meet, and when you go from here, visit the lakes, the rivers, the wonderful Saguenay, the St. Lawrence ; but don't neglect the meetings ; listen to the addresses, enter into the discussions ; if they are interesting, take credit for what you did to make them so ; catch the inspiration of this annually recurring occasion, enjoy the classic singing and reading, and return to your home glad that you came, and that your coming made others glad. Welcome from the remote corners to the centre of New England, welcome from the "Sunny South," welcome from the far-off West ;—welcome to all from whatever quarter.

More than fifty-three years have now elapsed since the organization of the American Institute of Instruction. The volumes of its annual proceedings containing addresses by the most experienced and thoughtful educators, have been widely scattered over the country. The influence the Institute has exerted upon our educational interests, who can estimate ?

In addition to furnishing instruction, through its lectures and public proceedings, for the past few years its policy has been to add to the literary attractions a kind of delightful object lesson, by meeting in some place which Nature has specially favored.

The effect of this policy has been to draw together a large number of persons not only from the different parts of New England, but from all over the country. This meeting will be attended by representatives of more than half the States, and some of the neighboring Provinces.

No question exists in my mind that the effect of this policy is every way favorable to the primary object of the Institute. So long as its literary character is maintained, there will be, of persons interested in its discussions, an increasing number to attend upon its meetings ; nor will the most indifferent teacher, being on the ground, fail to reap some benefit from these discussions.

But while the usefulness of the Institute is thus extended, the labor of providing and arranging for the meetings is greatly increased. And this leads to the question, how can provision be made for our large gatherings without imposing upon the officers more labor than the average school man can afford to bestow ?

The Institute should, I think, authorize the employment for this special work, of a secretary for two or three months of the year, who should be charged with the duty of arranging all the details of travel, and entertainment at hotels, of informing the public of the arrangements he has made, and of answering the questions of correspondents. Let this secretary be a permanent paid officer.

This duty rightly bestowed, the average school master chosen as your executive can devote himself to the proper duties of the executive office,—that of providing a feast of good things for the educational board being the most important. Then, untrammelled by the details to which your present executive has been subjected, he can come to the feast with a freshness and vigor with which a presiding officer should always be blessed.

PROGRAMME OF THIS MEETING.

In the wide range of subjects for discussion at such a meeting, it is impossible to do justice to all : an at-

tempt has therefore been made to provide for a somewhat exhaustive treatment of a few only. Yet, I apprehend, it will be found we have too many for our time. As you have seen by the printed programme the first subject to be discussed is the improvement of the common schools. The one point which should, I think, be brought distinctly to our minds, is the *proper adaptation of the course of studies* to the different grades of pupils. How shall the course of studies be arranged to afford the best quality and the fullest extent of education at whatever age the pupil may leave, is a question of great importance to all teachers, and of vital interest to all pupils.

Shall the child, as he proceeds, know all about a few things or something about many things? The schools of the past proceeded on the former plan; the child was kept upon the a, b, c's and the spelling out of words for the first years, and often, if he left school at an early age, this was the limit of his learning. Recently, the latter plan has been largely adopted: the a, b, c's and the spelling have a very subordinate place in the primary teaching. In the length of time the pupil formerly required to master very simple reading, he now learns something of form, color, number and other properties of many objects, and at the same time acquires the ability to express his knowledge with ease in drawings, or in well chosen language, both oral and written. He learns almost imperceptibly the alphabet, has more knowledge than before of the powers of the letters, and the ability much better to conceive and express the thoughts of an author.

All this results from treating the subjects of study and the mind according to their nature. Subjects must

be known in their general, before they can be studied in their particular aspects; the mind grasps things as wholes long before it can even discover their parts, or comprehend the relations of the parts.

The danger of overcrowding the pupil, — and it is a real danger, felt everywhere among faithful teachers and supervisors, — arises from an attempt to follow the old plan and the new at the same time. The new plan multiplies the topics of study; the old plan magnifies the importance of each. The solution of the problem will be in adapting the studies to the powers of the mind, in making the development of mind, and not the studies themselves, the end of education.

The demand for the high school in a system of public schools, a topic so ably treated last evening, is based upon the demand of our form of government, for the general enlightenment of the whole people. The course of studies in the high schools may undergo some modifications, it doubtless will; but, as a part of a system of public schools, the studies in general pursued in the high schools are as essential to good society and to good government, to the general elevation of the whole people, rich and poor, as are those of the primary or grammar schools. Indeed, there is no such thing as determining the relative importance of the different grades of schools. Each grade is as essential to all the others, and to the ends aimed at by the whole system, as are root and stalk, bud and flower to fruit.

Another topic already discussed, is industrial education, a subject by some deemed of such importance as to demand a place in the training of all our children. The Institute, two years since, provided for an annual report on this subject and voted to have a standing com-

mittee for this purpose. In this measure it has shown itself abreast of the times. The able paper of the chairman of the committee for the present year is already before you.

There are three other principal topics to be introduced into the exercises of the Institute: those to which I have alluded have reference to the course of studies, those remaining relate to methods of instruction and to the application of these methods.

The relation of the college to the common school will be treated by a wise executive of a New England college and by an able and experienced superintendent of schools. I shall not attempt to foreshadow their views; taking each a different standpoint they will no doubt coincide in this — that the college which created the common school, is itself dependent upon it for the efficiency and completeness of its work; they will also agree that where a failure exists in the primary work in the schools, the remedy, if not the responsibility, rests largely with the college. It is apparent that the indirect influence of the college upon the common school is exerted through the method and matter of the examinations for college, which determine those of the teaching in the lower schools, affecting even the lowest grades. The more direct influence is exerted when the teacher or the superintendent carries into the common school the methods he has acquired in the college.

The opportunity of the college for correcting bad methods in the common schools, is almost limitless; let her embrace that opportunity, by giving instruction to all her students in pedagogics and in the principles of psychology as applied to teaching.

Perhaps the most important topic on the programme

is that of School Supervision. The school laws of New England early established for her a complete system of schools. We have all the necessary grades, and all needed kinds of instruction, excepting possibly the kindergarten school and industrial training. We may look upon our system of schools with pride as a perfect organization.

If the schools have defects, they are defects not of organization, but of administration. Throughout New England, except in Massachusetts (and we had there till recently), we have in one form or another the District System, as it is called, with its District Committee exercising jurisdiction over the same schools with the Town Committee: the duties of these Boards are not always distinct and well defined; they are often conflicting: the duty of the latter is to superintend the instruction of the school, yet the former, appealing to local prejudice, may impose upon the school a teacher of incompetency, or exclude one of peculiar fitness and ability. The schools of New England have suffered much from this pernicious provision for their administration; the system should be abolished at once and forever.

The Town or Superintending Committee is the representative of the people: for the duties primarily imposed upon it this committee is adequate; it is the strong right arm upon which the schools rely for support and public confidence. Let its power never be less. But essential as is the office of School Committee, the schools of to-day have demands for supervision it cannot meet, for the present demands it is inadequate. It was well adapted to a period when every school contained pupils of all grades, when there was a narrow range of studies,

and when the teacher was his own most competent supervisor. Conditions have greatly changed.

Studies have largely multiplied. Topics once scarcely thought of have become branches. There are theories of teaching, these are discussed and applied ; there is an admitted philosophy underlying instruction ; elementary is now distinguished from scientific knowledge ; a place in the training of the child is assigned to each ; the principle of the division of labor has been introduced into teaching ; divisions and subdivisions have been formed within a town or within a school. It is often but a small part any one teacher has in the education of a single pupil. With all that the schools now demand, the majority of teachers are without professional training, are working by traditional rather than philosophic methods, and probably one in six of the teachers is without either training or experience. If now each teacher is left to form and execute his peculiar plan irrespective of others, as under the School Committee system of supervision he generally is, it will not be surprising if the result is a somewhat incomplete and one-sided education.

It may be true, it is true, that the schools of New England were never before doing so good work as to-day ; that they do so good work, considering all the circumstances, reflects the greatest credit upon the natural ability, upon the skill and intelligence of the whole body of our teachers. It does not at all disparage the schools, as a great moral and intellectual force in moulding the character of the children, to say they admit of great improvement in the kind and amount of knowledge imparted, in the culture they afford, and in the method of study so essential for future acquisition.

As a test of the amount of knowledge acquired, pretty careful examinations in the elementary studies have been made in four counties of one of the New England States, that may be fairly taken as representing the whole; and compared with the rank of some of the schools, and with what may fairly be expected of all, the rank of the whole is much too low.

The results show remarkable contrasts in the schools of a town, and in towns situated side by side; they give a hint at the remedy for so considerable a failure; for in all these examinations, it appears that the towns and cities having the best schools are those which have one or more persons on their School Committee, who exert a direct and peculiar influence; generally persons of experience in teaching, or else they have the service of an efficient superintendent of schools. It everywhere appears that the efficiency of the schools is proportioned to the effectiveness of the supervision.

This subject has been deemed by the Committee of Arrangements of such importance that they have invited representatives of the several New England States to set forth, each for his own, the peculiar merits and defects, together with the demands of supervision in his own locality. I venture to express the hope that these gentlemen will leave all that relates to school-houses, to compulsory attendance, etc., and come directly to the question of improving the schools in their discipline and modes of instruction, by means of better supervision.

Without anticipating what may be said, I venture to suggest that New England can safely impose larger duties upon the State Boards of Education. That in some way there should be associated with these Boards, and

acting as the agents of the local school committees, superintendents over the smaller groups of towns.

In many of our cities and large towns we have a similar officer, that is, a superintendent of schools. We need in all the towns such an influence as he exerts. The duties of this officer vary with the extent of territory over which his schools are spread, with the number and kind of schools. These duties will be set forth in a paper by Dr. Stone, of Springfield.

In the city they generally embrace the classification and grading of the schools ; the nomination of teachers ; the arrangement of the course of studies, with its proportionate assignment among the teachers ; an inspection of the teacher's work ; instruction in methods of teaching, with occasional practical illustrations, and the examination and promotion of the pupils.

In the less populous towns, the superintendent discharges all or any of the above duties, and to these adds the oversight of school-houses, including their construction, location, etc. ; he performs the clerical work of the Board ; administers its financial affairs, and attends to the purchase and distribution of books and school supplies.

Whatever his sphere, if local, an important duty of this officer through his reports, and by his daily intercourse, is to secure a cordial co-operation on the part of the parents, and an intelligent interest in behalf of the schools among the people.

If his jurisdiction should extend to groups of towns as I have suggested, his duties would be more or less general, according to the amount of local supervision exercised within his jurisdiction. With others of his associates he might assist in examining and recommend-

ing teachers ;— a work certainly for other than local boards. The superintendent of schools, whatever his jurisdiction, should be a teacher ; how else can he direct in methods of teaching ? He must be capable of organizing the schools, so that those of different grades shall work to a common end ; he must have a philosophical mind, else his schools will tend to routine ; he must be something more than a teacher, or a philosopher ; he must be a man of affairs, that he may command the respect of practical men. The subject is submitted to the meeting, in the hope that from its discussion may be evolved some plan of school supervision, especially for our smaller towns, which will arrest the attention, and approve itself to the thoughtful people of New England.

The question of teaching morals will occupy a part of our time, — once a simple question, now that Church and State are entirely divorced, a very difficult one. This question will fully occupy our last session, and be ably presented. Give it thoughtful attention, and be prepared with some words of wisdom.

With this brief presentation, these subjects are placed before you for consideration, in the confident hope that from their discussion by this large and intelligent body of educators, we shall both receive and impart instruction and inspiration.

II.

HOW CAN THE COMMON SCHOOLS BE IMPROVED?

BY THOMAS B. STOCKWELL.

I. What are the "common" schools?

In the early history of the country, the *common* schools were those schools which were ordinarily established wherever there were children enough to form a school; they were organized to meet the *common* wants of the people, to deal with those subjects which every one needs to know in *common* with every other person. They were then clearly distinguished by their universality of existence, and by their course of study and training, from the so-called grammar schools of that day, which were established for instruction in the higher branches of learning.

The basis of distinction, then, as now, between the "common schools" and the schools of other kinds involved no idea of inferiority, either in *personnel*, or character, or importance of the work to be done.

So, to-day, I would designate by the phrase "common schools" those schools which exist and are carried on for the same purpose for which the common schools of our fathers were created and maintained — the preparation of the *whole* people for those duties and responsibilities of life that are common to all of the citizens of a free country. These are the schools into which we may reasonably hope to bring, and in which we ought

to keep for some length of time, all the children of the land.

These schools include, at the present time, not only the ungraded schools, which was the only type of common schools in the early days, but also all of the schools of the primary and intermediate grades, with some of the grammar grades, but not all. As a matter of fact, the two upper grades, at least, of our well-organized grammar schools, have ceased to be, whatever they may have been, "common schools." The great majority of the children never reach them.

II. What are the facts as to the attendance upon the schools to-day?

In the case of the ungraded schools it is very apparent that their numbers have decidedly fallen off, and also that the decline is largely in the older pupils, who, finding themselves in an unpleasant minority, drop out, either to attend school no more, or to go to some academy or neighboring graded school.

The fact to be noted is that the number and age of the pupils of these schools are such as to call for essential modification in the plan which was found adapted to their needs a generation ago.

Turning to the graded schools, my observation in the schools of my own State leads me to fix upon twelve years as the age beyond which we cannot hope to retain the great body of the children in school continuously. A recent report of the Superintendent of the Schools of Boston contains a table classifying the pupils by ages and classes. That table shows from the age of six years to that of twelve a striking uniformity of numbers in attendance upon the schools; but the next year it drops in a remarkable manner; and the second year

after, still more, so that in the two years, the attendance falls off nearly one-half. An inspection of the figures to be found in other reports will reveal the same condition of affairs. Do we not, then, speak within due bounds, when we say that full one-half of the children of the present day close their continuous or regular school life with their twelfth year?

It will doubtless be said, that this ought not so to be. I will not dispute the "ought," but I must affirm the "be." It is a fact of our national life that we cannot shut out of our view. In the strife now going on, and, apparently, destined to go on for decades, and perhaps for centuries of years to come, between low wages and high cost of living, the great majority of the people are forced to become bread-winners at this early age. Many, far too many, enter the ranks before they attain even to that period. This, then, is the great truth to be noted and accepted in this connection. What we do for the great majority of the children in the schools must be done before they pass their twelfth year.

III. How are the schools, as we find them to-day, meeting this demand?

First, what can the ungraded schools show for their part of the work? The leading characteristic of the great majority of these schools to-day, is their diminished size. A generation ago it was not uncommon to find schools of this class with forty, fifty, and even sixty pupils. The classes were large, the spirit of the school was strong and wholesome; personal ambition, in its best estate, was a common characteristic of the pupils, and the school was, in every sense, a powerful intellectual and moral centre, every atom of which was in constant motion, sending out its influences in all

directions throughout the district. Now all is changed. A school of forty pupils is the exception, with the majority ranging from ten to twenty pupils. Classes are necessarily small in number of pupils, but as numerous as ever. There is the form of life without the substance. The work accomplished lacks the definiteness and precision of the former times. The directive force which was begotten of numbers brought into contact by a common purpose, and held to its place by the dominant sentiment of the community, has largely ceased to exist, and so far, no agency has been found to take its place. The village, town, and city are constantly drawing upon the outlying territory for its best, brightest, and most valuable men and women; those who, if they stayed at home, would inevitably, by the law of attraction, be found in more or less close contact with the schools, giving them character, shape, and direction. The entire lack of plan and system, the frequent change of teachers render any consecutive, logical training and development of the pupils an utter impossibility. The work has neither a beginning nor an ending, and no matter how long a time a pupil may remain in the school, there is no guarantee that his work will ever assume any degree of completeness. Excellencies in the work there may be, and in most cases, but the defects will be equally conspicuous. There will always be something to be made up.

Second, In the graded schools we admit that the deficiencies which we have noted in the ungraded schools do not exist to any great extent. We have plan, uniformity, spirit, and emulation, but there are other requirements which I think they fail to meet. The criticism which, in my opinion, may be laid with the

most justice against the graded school of to-day, is that it does not shape its course to meet the *common* needs as it ought, if it is to be *the* common school, but rather to answer the demands of a class, and that class a minority. It is a well-known fact to all persons familiar with courses of study, that they are all based upon the principle that the pupil is to begin with the primary school, and advance thence, by regular steps, up to the high school. Now for those pupils who complete the course, if they have been well taught, there is nothing more to be desired. But how is it for the vast majority of the children who do not complete it, or even approximate it? Is it not certain that they will inevitably fail to receive some of the essential elements of a proper education? It must be so, if the theory on which the course of study was constructed is correct, whereby a much longer continuance in school is demanded.

If this is true, ought we not to make our fixed course of study for the guidance of *all* of the pupils, such that it shall secure to *all* of them the essentials both of knowledge and of method which all require? Further, ought not the limit of that course and its character to be determined by the capacity and opportunity of the whole rather than by that of a minority?

Not many years since, one of our prominent educators declared it to be the duty of our schools to give to each pupil that training and preparation for the active duties of life which should enable him to step out of any grade, and enter at once into his life-work. By this statement, of course, he did not mean that as complete an education was to be given to a pupil who attends school for only one or two years, as to one who attended four, six, or eight years; but, that

each years' work in the school should be laid out, and the subjects assigned should be so taught that they should have an absolute value in themselves, independent of that which was to follow in the course; that the fundamental thought of the teacher should be to teach as though that year were to be the last that the child would spend in a school-room, and that, therefore, he would be able to acquire nothing beyond that point except by his own efforts. I have never heard this statement of the case contradicted, while I have heard it approved many times.

And yet, so far as I have been able to examine, I have failed to find, save in a few rare instances, any such positive and clearly defined effort to secure the fulfilment of its promise, as would indicate a genuine conviction of its truth. But it *will* come. It is a demand that exists in the nature of things, and such demands will be met and satisfied, sooner or later.

Thus far we have considered the work of these schools in reference to the wants of the pupils who do not pass beyond the lower grades, and have decided that it is not suited to their wants. The next question is, how far is it best adapted to those who complete the course? Is the theory a good one that there should be but one course, or line of study and development, which shall move on in unbroken continuity from the beginning? For myself, I cannot get rid of the impression that we make a mistake in developing the scientific side of the various branches of study pursued, both too soon, and too fully. We all agree now, that *scientific* knowledge must depend upon knowing the things, and the facts which belong to them. In geography, for instance, any *scientific* knowledge that is of

any educational value, must rest upon a *personal knowledge* and understanding of the facts concerned. Otherwise, the knowledge is vague, indefinite, having the form of life, but without its spirit. So in reading, we are wont to lay the stress of our effort upon the scientific portions, and pay too little to the matter itself, upon a correct apprehension of which, however, depends the success of the scientific work. But to accomplish either of the changes suggested will necessitate a broadening of the field of observation during the earlier years, and the wise selection of those topics for analysis and application, which shall give to the pupil the knowledge and power he does need, and omit what is not essential.

But enough has been said to indicate the lines along which the common schools fail, as they appear to me, to do the work laid upon them by the necessities of the case. Let us now consider the characteristics of that training and development, which *every* child should receive, and which he may, moreover, be reasonably expected to acquire within the six or seven years of continuous school life, which is, as we have seen, the extent of opportunity that is open to *all* of the children.

First, they are entitled to the possession of trained perceptive powers. These are nature's servants, set apart to minister to our varied needs, and through them comes the largest, and I might perhaps say the best, part of our knowledge. The extent of a man's practical equipment for the work of life is very largely measured by the use he can make of his powers of observation. What a man sees for himself in Nature's book is *his*, by right of discovery, just as real and inalienable as though no one else had ever seen or known it. No knowledge at

second-hand, however complete or valuable, is to be compared in its power of quickening and inspiring its possessor, and in its true educational force, to that which the mind discovers for itself. Doubly important are these perceptive powers to the child who is to be early cut off from the ready access to books and other means of acquiring information. Without them he is thrown into life almost helpless, so far as the power to develop into the perfect stature of a man is concerned.

Second, he is entitled to a working knowledge of his vernacular. He must know how to think, and also how to express his thoughts, either orally or in written discourse.

Language, in its three-fold form is the one acquisition he must have if he is to be a man among his fellows, if he is to be more than a machine or a beast. He *must* think, and he must be taught how to think correctly. The power is there, but it is latent; it is to be evolved by the skilful manipulation of the teacher. We may not expect to develop in the child the reflective power of a man, nor to render him capable of grappling with, and solving the problems that puzzle his parents; but there are problems which the youngest has to solve, practical questions that occur in his every-day life. To solve them he must think, and that the manner of that thinking be right, is as important as that the thinking of his elders should be so. Indeed, it is more important, for while the great problems of life have very largely been settled by the adult, they are yet to be settled by the child, and that settlement will depend upon *how* he thinks.

He who thinks much and well, will almost inevitably either write or speak somewhat. His thought will seek

expression. Thought is expansive; its natural tendency is to communicate itself to other intelligences. Hence, if we teach the children to think, they will demand the means of making that thought known, which calls for instruction in speaking and writing language. This work calls for a large place in any well-arranged curriculum of study. It should be recognized in the earliest work of the school, and should not be omitted at a single point along the whole school course. It should constitute the warp into which the rest of the course is to be woven.

There has been too common an opinion that the study of language was valuable mainly for the use to be made of it in expressing one's own thoughts to others. But it is of first importance in preparing the child to understand the thoughts of others, and thereby being able to appropriate them to himself, so that they become, as it were, his own. Without this power and the results it brings to him, a person will do but little thinking, and have but little need of any form of expression. No more valuable power can be conferred by his school on any pupil than that of connected thinking; by it he can unlock the storehouses of all knowledge, and once possessed of their treasures, he is prepared to make a wise use of them.

Third, he should have a *working* knowledge of numbers, of their simple or primary properties and relations, and of the application of those principles and relations to the solution of the questions that are common to our daily life. It is not necessary for him to know the *whole* of any one phase or department of the subject, before he passes on to others. Nor is it of so much importance that he be skilled and apt in the working of

intricate examples, as that he be able, readily and surely, to apply a more limited skill to those cases of actual life which must be determined. This science is really the science of values, and it calls for such a knowledge of it as shall confer on its possessor the ability to deal accurately and easily with those values that come within his range. Upon such a mastery as this, it will always be possible to build successfully as much higher and broader as future needs may require, or circumstances may afford the opportunity.

These requirements seem to call for the presence, to a greater or less extent, in all of our common schools, of the following studies : —

Natural History.

Reading.

Writing.

Spelling.

Composition.

Grammar.

Geography, including History.

Arithmetic.

The extent to which the work in these several branches should be carried may be briefly indicated.

In Natural Science, the work almost entirely is that of the observation of the facts. Scientific analysis and arrangement are to be considered only in the most simple and important cases. What departments of natural science shall be pursued are to be determined by the season, location, and other causes. They are all equally good for this work of training the percepts of the child.

Read for the thought *always*. Let the range of the reading be as wide as possible. Aim to make this the

attractive feature of the school work. Every boy and girl who leaves school after seven years of continuous instruction should have a genuine love for reading, with a taste sufficiently well cultivated to be trusted to guide him safely amid the flood of literature which covers the land.

Writing, as an art, should proceed side by side with reading, from the earliest step. When the art has been acquired in some measure, then the science of penmanship can be taught and appreciated.

Spelling as a special study calls for the acquisition of the knowledge of a good fair vocabulary, which means from a quarter, to a half, of the words found in the ordinary spellers. In addition to the specific knowledge of these words, the pupil should be taught *how* to learn the forms of new words as he meets them, *i. e.*, by the *eye*. To him whose eye has been trained to note and impress upon the mind the form of each *new* word, spelling is never a task. What he has *seen*, he knows, and for what he has not seen, he has no use.

Composition in its simplest forms will be an indispensable part of the earliest teaching. What the child has seen he will want to tell, and if from the very beginning he is encouraged and aided in this direction, he will never see the time when the task will be irksome more than any other ; but he will the rather delight in it for the recreation and variety to his work which it will afford. So that what to-day, in most schools of pupils from 12 to 16 years of age, is regarded by them with the most aversion, will become a pleasure.

Grammar in its highest sense cannot be taught in such a course as we have laid out ; there are, however, certain fundamental principles of the language, that are

so clearly apparent even to a child's mind, that he can be readily taught them ; and by their means brought to a sense of grammatical propriety, and hence to a desire to use correct English in his speech or writing. He will, therefore, aim to secure it, not through a study of the full science, but through imitation of his teacher, and of the authors whom he reads.

In Geography, our pupil should have a knowledge of the terminology of the general features of the earth as a whole ; and then such a definite and particular knowledge of his own country as the circumstances would permit. But whatever work he does then for his own country, should furnish him the method and clue, by means of which he may on his own account extend his study.

The History of a country, within very moderate limits, I think ought to be presented with its geography. It is always easy to interest a child in men of deeds, and when that interest has been aroused, it is but a step to transfer it from the *man* to the *place*, and you have at once a *reason* for the study, which did not before exist. As an aid to an interesting study of geography, I believe history to be invaluable. It is also entitled to consideration for the good it may do in awakening that love for good reading, to which allusion has already been made.

Arithmetic I have purposely placed at the end, for, heretofore, it has been pushed to the front so persistently that it has crowded out, oftentimes, everything else. I am fully persuaded that it has had an undue influence in the education of the past, and that many of the deficiencies noted at the present time in the habits, characters, and operations of men are due to that fact.

This re-adjustment of the school curriculum is essential to any permanent improvement. If it be objected that the change is too great, too abrupt, I answer that its pre-eminence is so thoroughly grounded in the experience and thought of all of us, that we shall, without doubt, give to it all of the time and attention it really deserves.

As to the amount of ground to be covered by such an elementary course as we have in mind, I would suggest the four fundamental rules or operations, including whole numbers and decimals, the tables of dry and liquid, long, square, and cubic measures, simple fractions, and percentage, in its *simple* relations, with applications to interest, profit and loss. With this scheme it is possible to secure a thorough knowledge of the *working* processes of arithmetic, and a ready and accurate use of them in all problems that would ever come within the range of the attention of the average man.

This, then, do I believe to be a system of education that is adapted to our needs, for it will secure to those who are compelled to leave school early a thorough knowledge of those essentials which they cannot do without, and which are sufficient for the wants of the time, and it will also afford a good, if not the best, foundation, on which they who are able to continue in school for a longer period may build the more complete and perfect structure.

Lest I should be charged with omitting the moral element in education, I would say that it has been passed by only because the length of time allotted for this paper is not sufficient for any consideration of the subject. I am as strenuous as any one for the better development of moral character, and in ascribing that

part of a teacher's work the first place in point of importance, but it has been my purpose in this paper to consider only intellectual or mental culture.

In conclusion, I desire to urge upon teachers the importance of bearing in mind, throughout all of their work, for the sake of those children who are the objects of an adverse fortune, that the shorter the time spent in school, the more imperative the need that they strive to train and develop the *powers* of the child, in preference to imparting mere knowledge.

DISCUSSION.

REMARKS OF GEORGE H. MARTIN, OF MASSACHUSETTS.

The first condition of improving the common schools is to foster in the public mind a broader conception of the function of these schools. So long as we think of them only as contrivances for teaching children to read, write, and cipher, making the three R's the end, the possibilities of improvement lie within very narrow limits. The idea itself is a mechanical one, and the improvement can only be mechanical. We may build a better factory, improve the condition of the operatives, diminish friction, and so increase the speed, and perhaps make more goods of the same kind in less time; but the goods are not worth the cost, and the business does not pay. Most of the improvements have been along this line, making what manufacturers call "the plant" more costly, without changing the character of the goods.

Any improvement worth discussing here, must, I think, have a different basis. The common school must be regarded as one of many agencies for the development of children as human beings. Each part of the work, and the sequence of the parts, must be determined by the activities of the mind, and the order of their unfolding, and the methods of work must be such as to promote a healthy unfolding. In a word, the essential condition of improve-

ment is to base the work on a broad and solid foundation of psychology.

If we accept this idea of the function of the schools, the methods of improvement at once suggest themselves. First, a course of study which can furnish food and exercise for all the powers of the child in the order of their activity. Such a course must necessarily be broader and more comprehensive than the one now in use. It must be based on sense-training, must include things, qualities, and relations, and must lead to thought, and thence to a three-fold expression of thought, by language, by drawing, and by mechanical construction. Thus the school might help in securing the practical knowledge and practical power which are so loudly called for, and so rarely found.

The new course of study should not only be more broad and comprehensive, it should be more logical in its arrangement than the old one. In such a course form would precede geometry; number, arithmetic; plant-study, botany; biography, history; not merely by pages or days, but by months or years. In such a plan we should never hear of "shorter courses" in natural science in high schools and colleges.

Such a course of study would have a two-fold excellence. It would stimulate to a healthy development of all the powers, and at the same time it would reveal individual aptitudes and invite to their cultivation. It would be adapted to secure both symmetry and eccentricity. This is the perfection of training. Just here is the weakest point in the system now in general use. It can not discover an Agassiz, a Stephenson, or a Gray at least before they are fifteen. How many such men have dropped out of schools before they were discovered, no one will ever know.

Trained according to the plan I have indicated, whenever the school-life ends, be it earlier or later, the mind of the student is prepared to receive as food, and assimilate for its continued growth, all the facts which the physical and social worlds have to present to it. So it is "fitted for life," as the phrase is.

But this course of study is only an instrument. To be of use in improving the schools it must be in the hands of teachers who comprehend it, that is, teachers who, having studied mind, know what the course as a whole, and what each part is intended to do, and who can devise methods of teaching and training in harmony with it. This is what is meant by a professionally trained teacher.

Such teachers are few, and the improvement we seek can only be secured by increasing the number. This is perhaps the most difficult part of the problem. Evidently the practice of taking students from the common schools, and sending them back to teach in the same schools with little additional culture, at most a thin high-school veneer, can only result in perpetuating the bad. It is a species of breeding-in which is disastrous. The normal schools are doing something to make good teaching possible, but they are too few and too small to make the progress rapid.

This fact leads me to say, thirdly, that the schools can only be improved by better supervision. The professional quality needed by the teachers is needed by the supervisors in a higher degree. They should be able to lay out such a course of study as I have spoken of, and to instruct the uninstructed teachers in the principles that underlie it, and in methods for carrying it out. Any conception of school supervision that does not have in it the idea of instruction will be found to fail in improving the schools. The superintendent must teach his teachers, or provide such as have been already taught. As a matter of fact, those superintendents who have made this part of their work most prominent have done the most to answer the question that is the subject of this discussion.

To improve the common schools, therefore, I should say, what has been said so many times before in the meetings of this Institute, as a pre-requisite condition, establish a truer conception of the work of these schools. Then as to methods, provide a more philosophical course of study; secure professional teachers; subject the whole to professional supervision.

Rev. Dr. Withrow was next called upon and said:—

The American Institute of Instruction representing the American people, ought to feel profoundly that it has the consciences of the children to teach, just as well as their intellects. If there is any one evil more serious than another in connection with this subject it is this: that because we are so jealous not to mix up denominational views on religion with State affairs, we are allowing an enormous number of our population to grow up who never can be reached as to their consciences, unless they are reached through our schools. The great contention is, shall we

have the Scriptures read in the schools? There never was a community any the worse for determining that it would have God's oracles read in its common schools? There is something for the instruction of the conscience in that book which is not found anywhere else.

I believe thoroughly, that in teaching young minds, more time ought to be given to the *training* of children than to imparting knowledge to them. I believe in practical education, practical religion, and practical life.

The next speaker was Mr. Fletcher, of Maine, who said : —

Parents by taking children out of school when they are twelve years of age, are overlooking a most important factor in education, that of maturity. The child leaving school at twelve years of age, and going out to do battle in life is at a great disadvantage.

If, however, we can make education more practical, I think that parents will be willing to leave their children longer in school, and make greater sacrifices if necessary in order to keep them there. It is not of so much importance when the children enter the business world, as that they enter it well prepared for the work before them

Mr. Sawyer, of Connecticut, was the next speaker. He said : —

It would be well if our children could remain longer in school ; and an advance in public sentiment will undoubtedly do something towards keeping them there. But after all, the stern necessities of life force many into channels of labor at a very early day, and we must do what we can for these. An improvement appears to be sought in the direction of a better quality of instruction, and marking out a more suitable and correct course of study. Not every teacher is competent to do this for himself ; and hence the importance of expert, professional supervision.

Rev. Mr. Barton, of Lynn, spoke as follows : —

I think that one way to improve the common schools in city and country is to remember that children have bodies, that need to be

thought of, before their minds need to be developed. It is well if we can carry along together, body, and mind, and soul; but certainly, if we want to have the children strong for their life-work, they have got to have sound bodies as well as brains.

Mr. Barrel, of Cambridge, Mass., said : —

I believe every teacher of experience will say, that one of the chief evils he has to contend with is the constant demand on the part of parents, that their children be put forward. Frequently do I have to say to parents, "Your child is not physically able to do this work." Almost every teacher is daily looking upon some pupil of his who he feels is going down to the grave, because of a system of dissipation (I know not what other name to give it), to which the pupil is subjected; out late of nights attending parties, and such like entertainments, so that if the teacher had his way, instead of asking the pupil to study, he would say to him, "You had better go home and go to sleep." I believe the trouble is not on account of the pressure brought to bear by the teachers, but because of the pressure brought to bear by the parents.

Mr. Charles Northend, of New Britain, Conn., said :—

One of the chief difficulties in the way of improvement in our schools is in the matter of employing teachers. This in our country towns is delegated to District Committee men, who are often elected by some two or three particular friends for the purpose of putting in some other friend into the teacher's office, who has no real fitness for it. So long as there is a lack of interest on the part of parents in the district meeting, we cannot have good schools. It is also impossible to have good schools without good teachers, and in many of our country towns the chief qualification of a teacher is that of being willing to teach cheap, or of being a relative or friend of the District Committee man. We need to awaken the interest of parents in this matter, and lead them to attend the District Meeting, and elect committee men who are fitted for their duties, and know what the schools ought to have.

III.

REPORT OF COMMITTEE ON INDUSTRIAL EDUCATION.

BY JOHN D. RUNKLE, CHAIRMAN.

Any one who has carefully examined the full and valuable report on Industrial Education in the United States, recently issued by the Bureau of Education, must have been greatly impressed with the magnitude and variety of the work already accomplished in this direction. Indeed, even now, no student wishing to prepare himself to follow any of the leading industrial pursuits, in their higher departments, need hesitate for want of reasonably good opportunities. He may not find all, and just what he wishes at any one place, for it will be noticed that of the prominent technical colleges or schools in this country, each has developed some subject or department more fully than others, sometimes on account of location and surrounding conditions, and often for reasons which in most cases it is not difficult to discover.

The agricultural colleges are most numerous, and present the greatest variety of type and method. Some are simply experimental stations for carrying on the investigation of questions relating to the subject; others offer more or less systematic courses of study, illustrated by practice on an experimental farm, which the student uses according as he is, or is not, already familiar with

the details of farm work and management ; and still others, where the student mainly supports himself by his work on the farm, and at the same time follows a course of study which is just what he needs for the pursuit of practical farming. Others, again, instead of general farming, emphasize some special department, as horticulture, pomology, forestry, or the care and rearing of animals.

Something of this variety would also be noticed if we should examine these institutions in reference to any other leading industry.

This, however, is not the phase of the problem of industrial education which we wish mainly at this time to consider. It is one extreme, in which we attempt to combine theory and practice, as the kindergarten may, in a sense, be regarded as the other extreme. But, between these wide limits lies the vast field of our public schools, in comparison with which all other phases of the educational problem sink into comparative insignificance.

In these schools the great mass of the people begin and end their education, and so far does this education enter as a shaping factor into our social and national life, that this life will be, in a large measure, what these schools make it ; and they will ever be successful in proportion as we foster and make them conform to all our highest and best needs, which will vary with the ever-varying circumstances and conditions of our civilization.

Not only should our schools endeavor to make the most of the individual as such, but also to make him most useful as a member of the body politic. The aim should be to develop and cultivate all his faculties and

powers in such a way as to aid him in determining which of them he can use to the best advantage.

Before raising the question as to whether our public schools at present do all, and the best that can be done, for the individual, and thus for the community, it may be well to consider briefly what we mean by industrial education.

In general we mean an education which prepares one to pursue some particular industry. This idea is the basis of all special schools. In a sense, there are as many forms of industrial education as there are separate and distinct industries; that is, given the industry, then the course of scientific or theoretical study, as well as the scheme of hand-work or manipulation, can be arranged to meet the demands of this industry.

On the other hand, industrial education is rapidly coming to mean such a broad and general training, both in theory and practice, both mentally and manually, as will secure a sound, general education, as well as fit the student to enter upon any one of a large group of allied industries if he shall choose to do so. This idea has given rise to what are now known as *mechanic art schools*, sometimes also called *manual training schools*, in distinction from *trade* or special schools. Broadly stated, science applied becomes an art, and an art applied becomes a trade. If we build our education on art, which belongs and corresponds to the earlier stages of mental growth, we can afterwards apply the knowledge and skill thus gained in industrial pursuits, or build upon this same foundation the scientific training which belongs to the after years of the educational course.

And first, let us briefly compare our public schools of

to-day with those of forty or fifty years ago, a time within the memory of at least one member of this committee. At that time the subjects studied, hardly taught, in the country schools were reading, spelling, writing, and arithmetic. We used Daboll's arithmetic, which consisted simply of written rules and examples, and the teaching was limited to showing the pupils how to apply the rules, and even in this the teacher was not always successful. About this time a great step in advance was taken, in the introduction of Woodbridge's geography. The flavor of that book is still fresh in my nostrils, but, unfortunately, it was as new to the teacher as pupils. At first we began to commit its pages to memory with childish pleasure ; the interest soon flagged, however, and we did but little besides look over the maps and pictures, and wonder how old Woodbridge must have been after doing so much traveling to get his information. The pupils ranged in age from five or six to twenty, or more, years, and with rare exceptions completed their literary education in these schools.

On the other hand, what do experienced educators now claim as a satisfactory course of elementary studies for the country schools? We will simply enumerate the studies in the report of a competent committee of the National Council of Education made last summer upon this subject. The Committee divides the pupils' school life into three stages or periods of development, with corresponding studies.

For the first, or period of observation and sensation : reading, spelling, elementary composition, numbers, linear drawing, singing, gymnastics, and simple lessons on the properties of things.

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For the second, or period of memory and imagination: a continuation of the studies of the first course, but more advanced, with the facts of history, elements of geography, and elementary lessons on plants, animals, minerals, chemistry, and physics.

For the third, or period of generalization and reasoning: the study of the above subjects in their more advanced forms, and finally, as sciences; and if the pupil remains during the third stage he may take lessons in geometry and algebra, and devote some time to the study of the ancient and modern languages. The industrial element of education should be introduced in some form so as to turn the attention of the pupils toward work while they are passing through the schools.

Such is the course of study outlined for which reasons are given — not an ideal course, but a real one, which we are to assume can, in the opinion of the committee, be accomplished under ordinarily favorable conditions. What a contrast between now and our school-boy days! Fifty years ago the college course fell far short of this range of studies; nor is it too much to add, often far short in philosophical methods of teaching.

While it is doubtless true that our best schools often fail fully to realize the standard set by the committee, all of us must recognize the great progress they have made, and the high rank they now occupy as factors in the people's culture, refinement, and intellectual growth.

As the means for developing the purely intellectual faculties of the pupil, they have not failed, and are not failing; and yet the question does arise whether the same ends may not be fully gained by a course of study not so entirely scholastic, by admitting that knowledge

and power may come to the mind through all the senses instead of a few, and that the training of the senses may thus serve the double purpose of discipline and utility.

Nor is this question a purely theoretical one. It is forced upon us as vital to our highest well-being as a people. It is involved in our industrial, and therefore, political economy—in the fundamental problem of labor. The causes of the deterioration and the unsatisfactory condition of labor in this country, and to nearly the same extent in many other countries, have been so often and so fully stated within the past few years, that we need at present do little more than call attention to them.

With the gradual and almost total extinction of apprenticeship, labor has become not only unskilled, and nearly dead to all sense of professional pride and ambition, but too often dishonest, demoralized, and brutal.

There is common testimony to the fact of the decay of the system of apprenticeship, and the causes, with only slight modifications, are the same the world over, the conflict between labor and capital, the rapid introduction of machinery, and the changed conditions resulting in all the producing and manufacturing industries.

The consequences are serious and far-reaching, and thoughtful persons everywhere are beginning to seek a remedy. As the system of apprenticeship was based upon a form of education, we naturally seek the remedy through the same agency.

And now we come to the question, Can we make our system of public education take the place of appren-

ticeship? Can we early in the child's school course gradually begin so to lay the foundation, that he may build upon it such a superstructure as he may wish? Can we so broaden our public education by gradually introducing manual instruction, adapted year by year to the age and capacity of the pupil, and yet not weaken, much less destroy, this public education? Can we so engraft manual instruction, that at the end of the grammar school course, say at fifteen or sixteen years, the graduate can go to the farm, the shop, the mill, the store, or any other pursuit he may choose, and be well prepared to meet the demands which these several ways in life will make upon him? Can we continue this manual instruction into the high school so that the graduate who wishes to pursue the higher departments of any special industrial profession, as agriculture, architecture, any branch of engineering, any textile industry, may be well prepared to pursue his specialty in a higher technical school? Or, if his school days shall end with the high school, may he not have a freer and wider choice of pursuits than his school-life now offers him?

All high schools now lead to the college and the learned professions; they all do, or should teach the sciences by the laboratory or manipulatory methods; will the student who comes to the high school with a manual added to his mental training, be any the less qualified to make use of the school in these directions?

As we have seen, our higher technical schools are rapidly introducing manual instruction, not in trades, but in the alphabet of mechanism—in the few arts which are fundamental in a large number of trades, or specific industries. Furthermore, the manual arts are

introduced and taught, not primarily, as the foundation of some trade, but as a part of the general discipline of the school, just as free-hand and mechanical drawing are taught, and justified on the ground of their educational value.

Not over one in a hundred, if so many, of all the students taught drawing in our public schools will ever make any professional use of the technical knowledge or skill acquired in the study, and it would obviously be unwise, as well as unjust, to compel the ninety and nine to study the subject for the benefit of the one. But drawing, in one form or another, has won its way into nearly all schools in the older countries, and is making rapid progress in our own. And while it is the universal language of handicraft, bringing the industrial ends of the earth together, just as the higher and finer arts express the feelings and sentiments of our common humanity, it has at the same time justified itself in all countries as a most valuable auxiliary to purely scholastic studies for developing the intellect, and widening and deepening the capacity and power of the individual. Nor would it be possible to estimate the value to the industries of the world, of this general cultivation of the intellect and taste through drawing. England has presented us during the past thirty years a most signal and striking example — one with which we are all familiar. Compare her textiles, ceramics, and indeed, all products depending upon a cultivated taste in design, with the same products of 1851, and you will read the lesson. And the same sure and steady progress has been made in all countries where drawing has been largely cultivated as a special industrial art, or introduced as a factor into the educational

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system. But drawing is essentially a manual art. Whatever of mental discipline, or cultivation of taste it offers, can only come through the training of the hand as the medium.

Little value would be derived by teaching drawing as a science without corresponding practice. It has its body of principles, but they can be better brought to the students' attention, and most clearly set forth in connection with a well-arranged and progressive course in manipulation. Besides, drawing is a study which can and should be begun long before the child's mind has the capacity to regard it as a science. At this period time is less valuable, the mental and physical muscles are more plastic, and it is easier to bend the twig as we would have the tree incline.

Apprenticeship as an educational method, in its best form, is defective in the absence, as a rule, of all system or philosophical basis, and because all mental studies usually end when apprenticeship begins. This country, so far as we know, has been the exception; the indenture providing in some cases that the apprentice should attend the public school a certain time each year. This custom brought the school and shop into important, although unofficial relations, which redounded to the great good of the apprentice. In a certain sense it has its parallel in Germany in the *Gewerbe* or trade schools, which, instead of teaching the manual of the trades, teach drawing and the elements of the sciences as they apply in the trades. The pupils in these schools are of two classes, either those who have already learned and are practising some trade, or younger pupils who propose soon to enter upon some trade or individual pursuit. This system will continue to produce good results

so long as the trades remain largely in individual hands, and the apprentices can be properly taught; but the concentration of manufacturing in large establishments, which is going on in Germany as in all other countries will in time make a resort to other methods necessary.

Indeed, a step in this direction has already been taken in the establishment within the past three years of a true mechanic art school for the metal industries at Iserlohn, Prussia, the first of its kind in Germany.

Its director is Prof. Theodore Reuter, who was the first to introduce the Russian or mechanic art system at Komotau in Bohemia in 1874. The metals studied are Iron, Copper, Brass, Bronze, Nickel and Silver — arranged in systematic courses of manipulations.

The following scheme contains the grouping by years of the scientific and manual courses.

A. SCIENTIFIC EDUCATION.

FIRST YEAR.

1. Model Drawing.
2. Ornamental Drawing.
3. Geometry.
4. Geometry applied to Design.
5. The German Language.
6. General Arithmetic and Book-keeping.
7. Algebra.
8. Natural Philosophy.

SECOND YEAR.

1. Ornamental Drawing.
2. Anatomical Drawing (the human figure).
3. The Science of Shading.
4. The Science of Perspective.

5. The German Language.
6. The Science of Projection.
7. Mechanical Calculations.
8. Natural Philosophy.
9. Technical Chemistry.
10. Mechanics.

THIRD YEAR.

1. Composing and inventing Designs.
2. The Drawing of Statues.
3. The History of the Arts.
4. The German Language.
5. Natural Philosophy.
6. Technology.
7. Technical Chemistry (Laboratory).
8. Statistics.

B. MANUAL EDUCATION.**FIRST YEAR.**

1. Modelling in Fine Clay.
2. Carving in Wood.
3. Moulding and Carving in Plaster.
4. Moulding in Sand.
5. Chipping and Filing.

SECOND YEAR.

1. Modelling in Wax.
2. Carving in Wood.
3. Carving in Plaster.
4. Moulding in Sand and Wax.
5. Casting in Bronze.
6. Shaping.
7. Planing.
8. Drilling.
9. Turning in Wood.

10. Turning in Metal.
11. Chasing in the Lathe.
12. Pressing, Stamping and Coining.

THIRD YEAR.

1. Forging.
2. Soldering.
3. Burnishing.
4. Embossing.
5. Chasing.
6. Engraving.
7. Etching.
8. Scouring.
9. Varnishing.
10. Galvanizing.
11. Nickel-Plating.
12. Fire-gilding.

It will be noticed that this manual education contains a large number of processes and variety of manipulations. As we divide drawing into free-hand, and mechanical or instrumental; that is free, and determinate, or perhaps as we might say, into qualitative and quantitative, so also in these manual courses we find the same general division — some are free-hand, guided only by the sense of form and proportion, or simply by the quality of the result which we wish to produce, while others involve fixed forms and dimensions, and the quality of the result depends almost entirely upon the exactness with which the given conditions are reproduced in the work.

These considerations serve as first hints in arranging courses of manipulations adapted to the age and state of development of the pupil. In the earlier years, say

from six to ten, while observation and sensation are to be cultivated, come the pencil in drawing, the brush in connection with the study of colors, the fingers, nature's tools, in modeling in clay, wax, or other plastic material, and gradually the qualitative use of the simpler instruments in mechanical drawing. In the later years of this period will also come moulding in sand or other proper material, and casting in plaster, lead, copper, bronze or other substances, which melt at comparatively low temperatures, and need only simple and inexpensive apparatus.

• In the second, or period of memory and imagination, say from ten to fourteen, will come reproduction from memory by drawing and modeling, and the first steps in invention or designing, carving in plaster and wood, with an elementary course in the use of carpenters' and joiners' tools.

In the third, or period of generalization and reasoning, say from fourteen to eighteen, will come an advanced course in carpentry and joinery, with pattern making, all to scale, an elementary course in forging, and hand and machine tool work in iron, steel, brass, etc.

This is a rough outline of the variety and kinds of hand work which may be taught between the ages of six and eighteen. At first impression it would seem quite impossible to introduce this great variety of hand instruction into our already crowded, if not overcrowded, course of public school study. But we must remember that only one hand study need be followed at a time, and only so much time devoted to it as its educational value may warrant.

Again, some good teachers claim that better methods of teaching the subjects now studied will gain time for

the introduction of a hand study ; others say from experience that a hand study properly taught which demands only four or five hours per week is not a detriment to the mental studies ; and still others say, lengthen the school day one hour and devote it to hand work, on the ground that it is a relief from mental studies, and being also in the nature of a physical exercise, this hour may well take the place of one of the usual play-hours.

We believe that there is force in each and all of these points, and that hand studies will prove an advantage to bright pupils, and a blessing to those of duller and slower intellects who early drop out of school for want of the kind of capacity to make them successful in purely mental studies.

In this connection the saying, "a sound mind in a sound body" assumes a peculiar meaning. By a sound mind we usually mean a developed and cultivated mind, and by a sound body, one free from disease and in a good condition of health. But we *should* mean not only a healthy and well developed body, but one so trained as to aid in the training of the mind during the whole educational course, as well as fitted to follow any pursuit demanding such training, which the taste or circumstances may dictate.

And important as it is, it is only recently that we have begun to consider the cultivation of the powers of the body by systematic physical culture as a part of education, and simply on sanitary grounds. Again, all children are born into this world to all appearances mentally alike ; but differences soon become apparent, and the aim should be to surround each child with the conditions most favorable to its physical and mental growth. The attempt to educate all children on the

same plan and by the same means and studies, proceeds on the assumption that all need and are capable of the same development. It is plain that all are not equally nourished by the same food, nor is the same food equally good at all periods of growth. This suggests whether similar care should not be taken with the mental growth of each child; and one of the criticisms made upon our system of public education is, that the grading and excessive method, which seem so necessary to the most orderly and economical administration of these schools, repress individuality, and produce a kind of mental average in which no single mind has grown under the most favorable conditions of freedom and exposure. On general grounds this criticism seems to be true, and one proof is found in the results produced in the ungraded country schools of the past, in which pupils of all ages and all states of progress were taught together by methods more nearly like personal than class instruction.

The remedy must come in good part in the earlier years, through drawing and other courses of manual studies in which more individual freedom may not only be allowed, but encouraged. In later years we are obliged to recognize the principle of diversity in our educational methods through special schools, special courses, the elective system of studies; and indeed by all forms of freedom and choice consistent with the good quality of the results to be obtained.

Further, besides the want of individual freedom in our public education, what is its spirit? what are the motives generally held out to the young by both parents and teachers, as the rewards of successful study? what are the avenues to wealth, station and influence usually brought to their attention?

Is the idea usually taught in our schools that the whole social fabric is built upon some form of labor, whether mental or manual, and that all forms contain the same moral elements, and are equally honorable, and that education provides for all, by cultivating all the capacities and aptitudes of the individual?

The conditions of life in this country are not to any great degree fixed and unyielding, but bend to individual power and will. Can we educate a community bound only by moral conditions and restraints, and yet train each for the largest individual freedom?

What is needed but a system which harmoniously develops all the powers, but through means which at the same time take into account individual aptitudes at the proper period? We do not claim that the graduates of our schools are not fitted to enter some spheres in life, nor that they desire to get a living without work, but simply that the school has not given them the same opportunity for preparation to enter other avenues of practical life. Nor is it to be assumed that habits of industry and predispositions are the same when acquired through the study of books alone, as when combined with the same habits and predilections acquired through manual and mental studies associated in the same course.

It is too obvious to require argument that in general a graduate from our public schools will learn a trade much better and quicker than an uneducated boy, all other conditions being the same; but it is not alone a question of capacity resulting from his education; it is also one of disposition. But few willingly enter upon apprenticeship as it now exists, who feel that their course of studies and their acquisitions have fitted them for some-

thing different—something which they have been taught to regard as better.

It is often said that the introduction of manual studies into our public schools is an attempt to make mechanics of all the pupils ; others fear that it will create too strong a tendency in this direction, and quote statistics to show that only a small proportion of our population are engaged in pursuits needing manual training. Why is it not assumed when an argument is made for the study of Latin in our high schools, that we are attempting to force or induce all students to go to college or into the learned professions ?

We are not supposed to know in advance, indeed we do not know each child's special aptitudes, nor do we know what the future has in store for him. It is the function of education to aid in answering these questions, and the education fails so far as it fails in this respect. And yet our public education is simply interested in most fully and completely developing and training the capacities of the individual through the proper means and opportunities, and not at all in the question as to what these capacities may be in each individual and to what use they may be devoted. Education aims to make men who will have the training to do what they choose, and when circumstances which are constantly changing through new inventions, new discoveries in science and art, or the introduction of new industries, shall make it desirable for them to change, their training has been such as to make the change not only possible but comparatively easy.

As a reason for not introducing manual studies into our public schools it is sometimes claimed that the mass of uneducated labor will in time be directed and in-

structed by those trained in special technical schools. This assumes that some form of apprenticeship will grow up in manufacturing establishments to take the place of the old, a result not likely to happen except in peculiar circumstances, so long as the conditions which destroyed the old remain.

And now a word as to the disciplinary value of manual studies. All manual as well as mental studies consist in the solution of a series of problems, and the quality of the training depends mainly upon the method and quality of these solutions — that is, mainly in the way we obtain our knowledge rather than in the facts of this knowledge. In the solution of a mechanical problem there are three distinct steps to be kept in mind, or ends to be gained. First comes the method of solution, with the reasons why the one adopted is better than any other. In mental studies the student often succeeds by what may be called a method of trial and failure, but here the waste of time, energy, and materials are too important not to be avoided at the earliest possible moment. Second, comes the ability to effect the solution according to the method decided upon ; and third, the training which enables the student to judge of the quality of the work.

Each of these steps should always be kept in mind by both teacher and pupil. The most effective method for training the judgment of the pupil in regard to the quality of his work has been by a system of inspection based upon its analysis into separate elements, and assigning to each element its proper value. This analysis should be clearly understood by the pupil, with the weight attached to each element when perfectly done, before beginning the work. During the solution the pupil's attention is

fixed in succession upon each element, with the desire to make it as perfect as possible. At the end, he has made up his mind, and usually quite closely, as to the percentage he has earned on the piece. It is quite obvious why it is easier here than in most mental studies to keep a more accurate account of the student's rate of progress and proficiency.

We must now close with a few practical thoughts and suggestions :

All public school instruction should be based on the single idea of a general development and preparation for the duties of active life ; and no study should be allowed a place which cannot be shown to have a positive educational value. Any other idea will lead to class or special schools an idea entirely at variance with the spirit of our social and political economy. But for the purposes of a general education a great range and variety of hand studies are not important. Enough can be done in the earlier years in modeling and in carving some soft materials ; in the later years in some special course, such as carpentry and joinery, to give a fair amount of manual training, — such a training as will enable the student to take up other hand studies further on in his course, or enter upon some industrial pursuit, if his aptitudes lie in this direction.

To give hand instruction its full educational value, it should be incorporated into the school course, and pursued systematically in connection with cognate studies ; and right pedagogic views are quite as important as in other subjects. It appears, then, that as a rule, hand instruction should not be given by the ordinarily trained mechanics, but by teachers who have had the proper preparation, which must include sufficient skill and

ability to teach. One of the places for this preparation, indeed the best place, is the Normal School, and it should include both men and women. There is not the slightest reason why women should not teach all the hand studies, including drawing, ever needed in our elementary and grammar schools. Nor is it necessary that the teachers should possess exceptional skill. If they know the principles of work in any special art, and can correctly explain the theory and use of the tools, they can give all needed hand instruction.

Only a short course of special instruction will be needed to prepare normal teachers for this work. It is to be remembered that a great amount and variety of hand instruction is not of so much importance as the fact that the subject should have its recognized place in the school, and all the pupils be required to do faithfully all the work which belongs to the course.

If only a single hand course in the use of tools can be taken in the grammar school, it is pretty well settled that this should be in wood, without there are local reasons, such as some predominating industry, for using some other material. Wood is better adapted to the physical strength of the pupils, while the tools and manipulations have a wide range of application in the industries. The work in wood can be divided into several courses adapted to the age of the pupil, such as carving, engraving, turning, model instruction in the use of carpenters' and joiners' tools, and if desirable a course in application to simple constructions with given dimensions. This work would be ample to cover the hand instruction of all classes up to the high school, say from six to fourteen years. Besides wood is a clean material and varies sufficiently in hardness and other qualities to illustrate

many of the properties and manipulations common to several different materials.

Another reason for selecting wood is the moderate cost of fitting a shop with fixtures and tools. If the number to be taught in a section is limited to twenty, which is too many if anything, the cost at the outside will not exceed five hundred dollars. If each pupil gets on the average one hour per day in the shop, it is easy to compute its teaching capacity. Successive classes or sections use the same tools, and with proper care on the part of the teacher, the annual expense of keeping the outfit in good condition will be small. Nor will the cost of materials be large. The instruction will always be given by small models, and the material which has served its purpose in one problem or lesson, can often be used in another, and so on till it is well used up. The material products of instruction have seldom any value except as waste.

If our public school system were equally developed in all parts of the country, the only question would be such modifications in hand instruction, as to material or other facts, as the circumstances of any locality might suggest.

But illiteracy comes in as a problem for special and profound consideration. Does not the system of public education, as we know it, need important modifications when applied to the vital question of illiteracy? Is it wise to build in all the waste places and sections of our country upon the educational type of New England?

Is not the question of the kind of education which we propose to supply to the illiterate millions of this country one of supreme importance?

Without attempting to ignore or disguise the facts, what is the inevitable destiny of these millions, and what

is the best preparation for this destiny? This destiny is manual labor, and it must be blessed by education. Educated labor is the true foundation on which to build, and is the only one which will stand the test of present and future needs. If the principles and practice of labor are taught, no matter in what field, a most important step will have been taken, and if to this we add the most elementary but thorough mental education, we shall have the best immediate result for the individual, and also a foundation on which any superstructure may be built in the future.

In all parts of our country where public education is well established and supported, we only need the incorporation of the manual element, but where there is practically no education, and all the conditions are materially changed if not inverted, we need a corresponding change in the solution of the educational problem. In the one case, mental studies are predominant and fundamental, and in the other, the hand studies become the true basis.

These, or similar conditions and wants, have given rise, mainly in France, to two corresponding classes of schools, the one the shop in the school in which the mental studies are the principal, and the hand studies subordinate and supplementary; and the other, the school in the shop, where the conditions are mainly reversed, the aim being a trade with such a mental education as a good mechanic needs. The same distinction holds abroad between farm and agricultural schools, the simple aim of the farm school being to teach all kinds of farm labor as fundamental with certain mental studies as supplementary. There will be found in the Forty-Fifth Annual Report of the Secretary of the Massachusetts Board of Education a full account of a farm school at

Hohenhein in Germany, which is worthy of examination in this connection.

Another objection often urged against the introduction of hand studies is the expense. It is true that it costs more to establish and support a modern technical school than a classical school of the same grade and size, for obvious reasons, and it is quite probable that after all the obstacles of inexperience and want of trained teachers have been removed, the cost of the education will still be somewhat increased. This objection will have but little weight, if the desirability of hand instruction is once demonstrated and settled.

Nor should we overlook the moral effect of this wider and better preparation for the active duties and pursuits of life ; the effect which comes from the higher estimate and value of labor which will generally prevail when hand studies are thought worthy to rank with mental studies in our public education ; from the influence on the habits, tastes and opinions of the pupil in whose education no distinction between mental and manual studies has been made ; and the effect through life upon the sentiments and character of those whose labor is ennobled by a consciousness of its dignity and made productive by a cultivated mind guiding a skilful hand.

When a boy by the commission of some petty offence gets into the reformatory, we begin to think of redeeming him by teaching him to do something. When shall we remember and act upon the fact that prevention is better and less expensive than cure, in the moral as well as in the physical life ?

In conclusion, we submit for your earnest consideration the following resolutions :

First. The single aim of our public education should

be the physical, mental, and moral training of the young, by all suitable means and agencies ; and no study or discipline which is not adapted to these ends for all pupils should be introduced into our public schools and supported at the public expense.

Second. While the training of the mental faculties must always be the first and distinct aim of all education, still this training is most effective when all the senses are most fully brought into play as factors in the general process.

Third. We believe that hand instruction, no matter of what kind, if adapted to the age of the pupil and properly conducted, can be made disciplinary, and a valuable adjunct to the purely literary studies.

Fourth. We believe that a hand study, requiring not more on the average than one hour per day, can be introduced into our public schools without impairing the educational value of the studies now taught, and with no abridgment of the time now devoted to them which will not come through better methods of teaching, or on other grounds.

Fifth. We believe that a workshop, as part of the apparatus of a public school, is as desirable as a science laboratory is to the technical school or college.

Sixth. It is the deliberate opinion of this Association that the time has come when hand work should be taught to the proper extent in all our public schools, both because of its educational value, and because the social and industrial conditions have so changed as to make such teaching necessary.

NOTE.—As no opportunity offered for either the Committee or the Association to properly consider this paper, it must be considered as simply expressing the opinions of the writer. — J. D. R.

IV.

THE PUBLIC HIGH SCHOOL AND CITIZENSHIP.

BY HOMER B. SPRAGUE, OF BOSTON.

In arguing, this evening, for the liberal support of high schools, I do not lay stress upon the fact that they are the chief means of furnishing a sufficient supply of well-qualified instructors for primary and grammar schools. Nor do I urge that they are needed as a stimulus to pupils in lower grades, holding up ever before them a goal and a reward of praiseworthy effort, and illustrating the truth of the proposition that elementary education is most efficient where the opportunity of advanced instruction is most ample. Nor do I insist that education multiplies for the recipient the sources of enjoyment and the opportunities of usefulness. Nor need I advance the argument that they tend powerfully to destroy the odious spirit of caste, promote equality and fraternity, lift up the humble, give the poor a fair chance to escape poverty, assure them that promotion depends on merit, display before them the precious fruits of wisdom as a thing desirable and attainable, and that so they unify our people, levelling none down but all up, reducing to a minimum the lower classes, and replenishing to a maximum the middle classes that are the glory and strength of a free state. Nor will I claim to-day that it is for the general interest of society that no talent be lost for want of due cultivation, and that the perfec-

tion of social life demands that every intellect be the best possible. Not because the high schools, while they inspire the lower, also feed the higher, the colleges, the universities, and learned professions; not because they are established institutions that have been required by law for generations past, the pride of the communities in which they exist, a perpetual reminder to all the people of the value of learning and science; not because they make labor more intelligent, more versatile, more inventive, more fertile in resources, more honorable, because brain is mingled with brawn and the worker is a thinker; not because they draw to their neighborhood a desirable population of parents who would fain give their children wisdom which "is better than rubies;" not because every generous soul that passes through years of high-school training must needs love the community that has done so much for him, and cannot be other than a patriot; not because of the doctrine which was dear to Horace Mann, and advocated by him with consummate eloquence, that knowledge is the natural right of every human being, and that it is the duty of the State to make it as free as air;—not for any one nor for all of these combined, sound as I believe them to be, and irresistible as is the conclusion to which they lead, do I now maintain that the American people ought to multiply high schools and in the greatest possible degree ought to increase their efficiency.

But I lay down this one proposition, that in a government *by the people* it is the right and the duty of the State to make sure that at least a majority of the voting population shall have intelligence enough "to fit them," in the language of Milton, "to perform justly, skilfully and magnanimously" all the ordinary offices of citizenship.

I assume, at the outset, that we are fortunate in our political constitution ; that our freedom is not a sham but a reality ; that the great and the wise and the good, who in all ages have celebrated the value of liberty, have not been deluded ; that the martyrs who in many centuries and many countries have died for the rights of man, have not died for nought ; that the heroic English champions of humanity in its long struggles against tyranny, wresting from reluctant kings the trial by jury, the *habeas corpus*, representative government, freedom of worship, and exemption from taxation without representation, are worthy of immortal honor ; that the tears and toil and blood of our own fathers and our own brothers in two great wars have not been wasted ; in a word, that the equal rights of all to life, liberty, the property they have earned, a free conscience, free speech, free press, equal participation in the government, the innocent pursuit of happiness, and the largest possible development of mind and heart, are unspeakably precious. I repeat, unless our liberties are an empty boast ; our supposed opportunities of individual progress in mental, moral, and physical welfare, a fiction ; our political principles a fraud ; our history a lie ; and our future prospects a mirage or a dream ; it is one of the most sacred of all duties to cherish our system of government, to make sure of its effective and easy working, to guard it against all possible dangers, and to secure its permanency..

Another premise I assume ; that there can be no reasonable expectation of any further restriction upon the elective franchise. The tendencies are rather towards its extension. The ballot never will be limited by law to the wise and good. Rightly or wrongly, property

qualifications, sex qualifications, educational qualifications seem destined to disappear. Possibly suffrage will not be extended ; certainly it will not in any considerable degree be curtailed. Political annihilation awaits him who would restrict it peaceably ; fire and blood and dynamite await him who would restrict it forcibly. Ours is and must be a government *by the people*, with all that the phrase implies. All that it implies !

What is implied in a government by the people ? The answer to this question will dispose of another inquiry often made by well-meaning persons who would reduce public school education to a minimum and abolish high schools altogether. They ask, why is it not enough, if the State teaches the elements of learning, just what is sufficient to enable the voter to perform the ordinary duties of citizens ? What right has the community to furnish at the public expense anything more than those rudiments which qualify one to discharge the common duties of civil life ? If the State teaches the child to read intelligently, to write a good hand, and to perform tolerably the processes of simple arithmetic, why is not that enough ?

Such questions are grounded on a total misconception of what is included in the fact of a government *by the people*. To govern a child well, requires wisdom. To govern a large family well, requires intelligence, energy, tact, and integrity. And what is it to attend to the interests, to manage the affairs, and to make, interpret, and execute the laws of a town, a state, a nation ? What is involved in the common duties of citizens ? Let us see.

Every town is a pure democracy. Every voter in the

town (that is, with few exceptions, every male person twenty-one years and upwards,) is asked in town-meeting his will in regard to measures of great importance. By voting, he says, "I command," by not voting he says, "I permit." A failure to vote is itself a vote of acquiescence, and a license to the majority. He cannot escape responsibility. He is and must be a voter.

I am a citizen of a town. Here are some of the questions which, by voting or failing to vote, I help to decide: Shall licenses be granted for the sale of intoxicating liquors in this town? the question that was asked in every town in Massachusetts last fall. Yes, or no? Shall the town establish a public library, a public reading-room, public baths, water-works, reservoirs, a lock-up for offenders, a fire department, a board of health, a system of sewerage? hospitals for patients suffering from contagious diseases? Yes, or no? What burial-grounds shall the town provide? what schools? what roads? what workhouses or almshouses? what bridges? what means for vaccination? what watchmen? what police? what sidewalks? what street lamps? and at what expense? Shall this town take stock in railroad corporations; and if so, how much? shall it publish a town history? afford special relief to the families of soldiers and sailors? celebrate its centennial? erect a soldiers' monument? plant shade-trees? purchase or take land for town purposes? build a town hall? erect drinking troughs, wells, and fountains? maintain pounds for stray animals? appropriate money for the destruction of noxious beasts? offer rewards for the apprehension of felons? abolish the school district system? require the school committee to appoint a superintendent? convey pupils to and from the public

schools? construct electric telegraphs? authorize them to be constructed by others? raise money for armories? make provision for the care and education of neglected children? what shall be the limit of expenditure for any or all of these objects? Whom shall we choose for selectmen, town clerk, treasurer, assessors, overseers of the poor, highway surveyors, constables, field drivers, fence viewers, tax collectors, measurers of wood, surveyors of lumber, pound-keepers, school committee? etc. These are a part of the questions that arise in the ordinary routine of town business, and every voter is called upon in town meeting to decide them by his direct vote. Sometimes many of these matters are simultaneously pressing for decision, and the most serious results depend. To exercise the elective franchise wisely in town affairs requires vigilance, nice discernment, large grasp of principles and of facts, sound judgment, and scrupulous fidelity. The best education the high school can give, its best discipline, its widest information, are none too great to meet these responsibilities.

But when we pass from the town to the city, these responsibilities are much increased. With all the variety and multiplicity of town affairs, there is yet in them a simplicity which makes them comprehensible, however difficult it may be to arrive in all cases at wise decisions. But a great city, with its Mayor, Aldermen, and Common Council and its many committees, is not only much more complicated in its government, but it deals with a larger number of matters of legislation, and takes on, in a far higher degree, the character of a gigantic business corporation, or rather of many business corporations united under one management. For example, in the city of Boston there are fifty-five departments or

divisions for revenue and expenditure, thus : Departments of Public Education, of Architects, Armories, Advertising ; Departments of Health, Harbors, Bridges, Cemeteries, Driveways, City Debt, Hospitals, Registrars, Cochituate water, Collectors, Public Common and Garden, Contingent Funds, Deeds, Ferries, Engineers, Fire Department, Park, Sewers, and thirty or forty others. Some of these have many sub-divisions : for instance, the department of Public Institutions includes among others, a house of industry, house of correction, lunatic hospital, a steamboat with captain, engineer, mate, firemen, and deck hands ; a home for pauper and neglected boys, another for girls ; two almshouses, farm houses, workshops, laundries, bakeries, piggeries, etc. Under the title Contingent Funds appropriations to the amount of \$21,000 are made for sixty-two committees, whose principal business appears to be to eat and drink and ride and smoke at the public cost, while nominally investigating all sorts of subjects from vinegar to water supply, from ballot boxes to Fire Department, and from funerals to Independence Day. The city payments are for a thousand kinds of service and for materials innumerable, the detailed statement and classification of which covers one hundred and ninety-one pages of the Auditor's report for 1881-1882, and the aggregate expenditure is over sixteen and a quarter million dollars a year.

The pecuniary interests entrusted to a city government, and the business enterprises it carries on, are thus multitudinous and vast. One would say that the clearest brain is none too clear, the sharpest insight is none too sharp, the strongest grip of right principles is none too strong to manage interests like these. All

that education can do should be done, to clarify, to make keen, to inform, to broaden, and to energize the mind of him who is to do these things or sit in judgment upon the men and the measures. But more precious by far than any financial values are the honor of the city, the health, the lives, the liberties of its citizens. He who controls the city should have a heart as well as a brain, a conscience as well as an intellect, a reverence for God above all reverence for mammon.

Now the city government, though less directly than that of a town, is just as truly in the control of the voters. The questions are put less sharply but none the less really. The mayor, the aldermen, the councilors, recognize the voters as their masters. The stream does not rise above its fountain, and the people are the fountain. Men stand for measures. The candidate is identified with a policy. He is under express or implied pledges. We know beforehand what he will do if elected. If the liquor shop chooses your city officers, it will be as it is in some of our great cities to-day, a government of the liquor shop, by the liquor shop, and for the liquor shop. The multitude and the magnitude of the issues entrusted to every holder of the ballot in a city may well awaken the most serious thought, and, if the average elector be not wise and good, profound alarm. He holds the lightning in his hands.

But even this view is insufficient to show the full force of the argument in favor of a high education for the mass of electors. Above the city is the State, touching us by its legislation at every point and at every instant; guarding or attempting to guard, with sleepless vigilance, our health, our comfort, our lives, our property, our reputation, our liberties. I cannot even name the

many ways in which the State, like a tender mother, undertakes to care for her children and to supply every want ; enumerating in the Constitution the sacred rights of every man ; marking out the framework of the government with its threefold division into legislative, judicial and executive functions, with metes and bounds, that no voter may miss. It seeks in the laws made by the people and which every man is supposed to know, to secure a right administration of the government ; fair elections ; just taxations ; an effective militia ; the wise and harmonious action of towns, cities, counties and the State ; the protection of religious, charitable and educational associations ; the instruction of all children and youth ; the promotion of the public convenience by roads, bridges, ferries, sewers, drains, sidewalks ; the encouragement of commerce ; the safety of trade and business ; the prevention of frauds and perjuries ; the judicious working of the internal police of the commonwealth so as to avert disease, advance science and learning, protect the weak, suppress gambling and drunkenness and nuisances, reclaim the erring and restrain the incorrigible ; a clear understanding of the powers, duties and liabilities of corporations ; a knowledge of the principles which govern the possession, the title, and the transfer of real and personal property, and the settlement of estates ; the sanctity of the domestic relations ; a recognition of the jurisdiction of all courts and judicial officers, and of the proper modes of proceeding in them or under their authority. These and a hundred other subjects of general or special interest occupy from time to time the attention of legislators, enter more or less into the platforms and creeds of political parties, are represented by candidates, and require of every voter that he should have upon

them an intelligent opinion, which he may express by ballot. Nothing is so vast, nothing so minute, nothing so settled, nothing so sacred, that it may not enter as an issue in an election. Justice or injustice, honor or ignominy, prosperity or wretchedness, often hangs upon the decision of the hour, and bitter may the penalty be if that decision is wrong. Can a commonwealth take too great pains to train to consummate skill, and thoroughness, and wisdom, the intellects and consciences of all in whose hands are placed powers so far-reaching and tremendous? To say nothing of the delicate, difficult, and weighty problems that arise for solution every year in the ordinary routine of State business, the people of Massachusetts have ten times during the last half-century, by a direct Yes and No vote, adopted amendments to their State Constitutions. Some of these Constitutional changes have been of a fundamental character and of measureless importance. Lives there a man who will say that the best education possible, in matters of civil polity and of political history, is not requisite, yea, indispensable, in deciding questions like these? And shall not the State give such education and make sure that it is sufficiently received?

But even this is not all. Above the State is the Nation, the central sun of this governmental planetary system; the Nation, with all its complicated relations to the people, to the State and to the world; the Nation with innumerable interests to care for and immeasurable power to wield. The history of mankind has hitherto presented no questions more momentous or perplexing than those which this republic has been forced to consider and decide during the last twenty-five years. Think of some of them! Slavery or freedom for four millions; a civil war

unparalleled in extent and character ; two nations or one, the reconstruction of the torn and shattered South, the notice to a great foreign power to quit this continent, tariff or free trade, financial honor or repudiation, the assassination of two presidents, what to do with the Indian, what to do with the freedman, what to do with the Chinese, what to do with the Mormon ; the Pacific railway, the improvement of the navigation of the Mississippi, the purchase of Alaska, the reform of the civil service, the Monroe Doctrine, the payment of the national debt, — these are but specimens of the many great problems with which America has had to grapple during the last quarter of a century. Yet all these issues are submitted to the people for decision at the ballot-box. We have the astonishing spectacle of a nation of fifty millions pausing once in four years, nay, at every election of a Representative to the United States Congress, to ask the humblest voter what is his will on great questions of national policy. Directly or indirectly the answer is given, the ballots are counted, and the voice of the people is obeyed as if it were the voice of God.

Who is sufficient for these things ?

“ If the blind lead the blind, shall not both fall into the ditch ? ” On what great question are not the masses blind ? Does a knowledge of “ the three R’s ” enable the average voter to decide correctly an election issue involving a protective or revenue tariff, the best mode of securing civil service reform, the proper treatment of the Indians, woman suffrage, the right size and cost of our army and navy, national aid to education, a general bankrupt law, the admission of new States into the Union, land monopolies, river and harbor improvements, geological surveys, astronomical observations,

meteorological predictions, encouragement of agriculture and the fisheries, silver coinage, international arbitration, greenback currency, national banking, payment or funding of the public debt, the promotion of American commerce, subsidies to American steamers, cheap postage, the absorption by the nation of the telegraph system as an ally to the Post Office, treaties of alliance or commerce, the dangers from great money corporations or the combinations of money kings, the naturalization of foreigners, the suppression of conspiracies against foreign governments, the extradition of alleged criminals?

Often these and similar issues are involved in municipal and State elections as well as the national. Their decision is among the ordinary duties of citizens. Is it not absurd, is it not ridiculous, is it not silly beyond expression to expect a wise use of the sovereign power of the ballot in the hands of those who have merely the rudiments of knowledge? Can stupidity go farther?

Again, with certain exemptions, mostly of those whose position or occupation insures more than average intelligence, every man is liable to serve as a juror. To impanel twelve honest jurymen seemed to one of the wisest of observers, De Tocqueville, a chief end of our political system. No interest so great, no issue so subtle that it may not be submitted to the verdict of a jury. Questions infinitely varied, involving the most complicated mechanism, the nicest interpretation of language, the siftings of great masses of evidence, the comprehension of the most recondite truths of science, the thorough grasp of principles of law, the acute discernment of moral distinctions,— these are every day adjudicated by men picked up from the street, from the saloon, from

the store, from the factory, some of whom hardly know right hand from left. Think of the mental and moral character of some of the jurors in the great trial just concluded at Washington. The untrustworthiness of such tribunals has given rise to the wicked proverb among lawyers, "Omniscience itself cannot foresee the verdict of a petit jury."

Furthermore, any man may become a member of a State legislature, of a board of aldermen, a city council, or a school committee. Ignorance is no bar; rascality is no bar. With many voters it is a recommendation. Whittier tells us that,

"In the old days, (a custom laid aside
With breeches and cocked hats,) the people sent
Their wisest men to make the public laws,"

but now they send him who can buy or beg or steal the most votes. The "hoodlums" like to have "friends at court," some of their own number in office. The honor and the fortunes of the city or the State, the property and lives of the people, all the worldly interests that men hold dear and that legislation can help or harm, are by the ballots of the people entrusted to officials who neither know nor care what they do, provided they and their friends get a large share of the spoils. The Tennessee legislature is reported to have recently legalized theft, if the holders of State bonds are the victims. The people of Mississippi have enacted cheating into a fundamental law, adopting a constitutional provision to the effect that in one great matter their State shall never be honest; that neither principal nor interest of several millions of dollars, justly due, shall ever be paid. The Maine legislature means well, but it has lately passed a law to this effect: "Any officer or agent

of any society for the prevention of cruelty to animals, may take possession of any old, maimed, disabled, diseased or injured horse or other animal not properly cared for, and may destroy, or cause to be destroyed, such horse or other animals." Lest it might be supposed that this provision would not permit the killing of "old, maimed, disabled, diseased, or injured" human beings, another section of the same act expressly provides, "In this act the word 'animal' shall be held to include every living creature!" Massachusetts does not yet cheat her creditors, nor put to death her decrepit citizens; but she builds railways at frightful cost, and, if her foremost officer is to be believed, she indulges in some extraordinary housekeeping. She has but herself to blame, if a vision of her wounded honor, her pristine glory, now bedraggled with mire, passes before her face, exclaiming in the language of the horrified and remorse-stricken duke in "Richard III":—

"Clarence is come, false, fleeting, perjured Clarence!
That stabbed me in the field at Tewksbury!"

Boston is the grandest and best of the great American cities,

"Our own fair land, refinement's chosen seat,
Art's trophied dwelling, learning's green retreat,
By valor guarded and by victory crowned."

If, with her noble history and in spite of her glorious traditions; if, notwithstanding her eight public high schools, her two public Latin schools, and her city normal school; maugre her monuments, parks, fountains, public gardens, electric lights, free Sunday concerts and her unequalled public library; she spends well nigh a hundred thousand dollars a year for "refreshments,"

largely intoxicating liquors and cigars for city officers and friends ; if her authorities by their inaction virtually license seventy-five well-known gambling hells and one hundred and twenty registered houses of prostitution ; if public schools are removed from certain localities in order that whiskey shops may be licensed there ; if thousands of dollars worth of wretched novels are annually purchased and circulated among the young at the city's expense ; if certain members of the City Council cannot fairly read and write ; if a majority of them are connected with the liquor traffic ; if fourteen hundred friends of members of the city government, on invitation, join an excursion in honor of a few visiting guests from a distant State, and with a strong hand, like savages, hustle those guests from the tables, seize the viands and the refreshments, and swim in champagne and whiskey at the city's expense, hoping that some euphonious phrase like " contingent funds " will cover the \$5,000 cost,—if but a tenth of all this is true, it but proves that our present methods and means of securing good government, even under the most favorable circumstances, are totally inadequate. We do not get, with all our painstaking, a controlling body of intelligent citizens, even in Boston. But Boston is a paradise compared with some sections of our country.

We need an educational revival. More knowledge, more wisdom, more conscience among the masses, especially in things pertaining to citizenship — more of the masses lifted to a high-school level — the importance of these can hardly be overstated. A controlling body of well-educated men and women in town, in city, in the state, and in the nation, — a sure majority of intelligent men and women who know their duties and

who love their country and love righteousness — this is the desideratum, to supply which all educational energies should be directed. Pardon me for iterating and reiterating this point. A clear majority of voters blest with good common sense, with wide information, with thorough training and incorruptible integrity — this is the minimum at which educators should aim, the only security against unspeakable blunders and crimes and miseries and shames. The popular will, unguided by intellect and unrestrained by conscience, is an immeasurable and irresponsible motive power in our ship of state, a power that may at any moment drive it upon rocks or blow it to fragments. We had a narrow escape in 1861, when one third of the officers, helmsmen, watchmen, engineers, firemen, crew, were blind or drunk or insane or mutinous, and sought to break it in two amidships; and the captain of the vessel, that poor "old public functionary," professed himself destitute of any right to coerce a state and keep the craft whole; and only the education of the North barely saved it from the billows that roll over every republic of the past.

Industrial education is a good thing, but it is not a vital necessity. In some way or other it will come, with or without the public school. A wise administration of the government by the people *is* a vital necessity. It will *not* come without the public high-school. Collegiate education is a good thing, but it is not enough. For two centuries the college ruled public sentiment; but it has lost its leadership never to be regained. A college diploma may even cause unpopularity. If private schools, or parish schools, or parental instruction, or Sunday schools, or primary schools, or grammar schools, or academies, or colleges, or universities, or all these

combined, suffice to make the masses wise and good, or if they afford any guarantee that the masses will shun demagogues and follow intelligent patriots, then perhaps institutions for secondary education may be dispensed with. But they do not suffice ; they afford no such guarantee. The worse is made to appear the better reason, the demagogue is elected, the patriot is out-voted, the legislator is bribed, the faithful servant of the people is dismissed to punish political opposition, or to make room for the appointment of a party tool, the great thief is acquitted, the insane man is hanged, the honest representative is made a scapegoat, vice and crime are ignored by the sworn executors of the law, lest the votes of the vicious and the criminal turn out of office the executors of the law. A thousand million dollars since the adoption of our political constitution have been spent in wicked wars to exterminate the Indian or in absurd bounties to buy him off, and still the folly goes on. Occasionally an unutterable calamity like the southern rebellion, the outcome of false doctrine persistently taught by the cunning few and devoutly believed by the ignorant many, startles the nation to a momentary consciousness of the vital necessity of sound political views. Ten thousand million dollars swept into annihilation ; 700,000 men, the flower of America, sinking into untimely graves : a million homes draped in mourning ; and still the lesson is not learned ; still the sound political views are not inculcated ; and the mass of the Southern people feel to-day that they were simply overpowered by physical force, not that they were morally wrong.

I do not claim that a high-school education precisely according to the present curriculum of studies would be

sufficient to secure the one thing needful — a controlling majority of intelligent and patriotic citizens in every community. Some modifications would doubtless be desirable. Particularly, more emphasis by far should be laid upon those studies which bear directly upon citizenship. American history and civil government should occupy a foremost place. “The holy bounds of property”; the sacredness of law, the preciousness of human rights; the claims of international comity; the just limits of national, state, county, and municipal jurisdiction; the independence of the legislative, judicial, and executive departments; the checks and balances of the constitution; the duty of loyalty to the nation; the sanctity of treaties; the conduct of public meetings, parliamentary practice; the history of liberty, the story of its perils, its heroes and martyrs,—all these should be taught, whatever else be omitted. Ancient and modern languages might in many institutions be discarded, or their study reduced to a minimum. The English language with its ennobling literature should receive more attention. And there should be something of the higher mathematics, much more of the practical applications of mathematics; and enough of chemistry, and physics, and botany, and zoölogy, and art, to enable the voter to deal intelligently with the questions that the town, city, state, and national governments thrust before him for decision. Few of the branches of high-school instruction could be spared, and some of those that seem least useful, might be of great value as a mental discipline.

To provide that indispensable body of educated voters out-numbering the ignorant, I see no possible agency of sufficient power other than the public high school. I grant that, if it were possible to fashion, in every child's

mind or in the majority of children's minds, a lofty ideal of Christian character, and at the same time instil into every child's heart, or into the majority of children's hearts, such a high moral purpose, as should insure the child's entire consecration and unflagging devotion through many years to the attainment of that ideal ; a very slight beginning, even a primary-school education, might be sufficient. Such an ideal, such a purpose, such a consecration, such a devotion, might dispense with institutions for secondary or superior instruction, though, even for such, the high school and the colleges would be potent auxiliaries. Such a childhood was that of Milton, of Arnold of Rugby, of Washington, perhaps of Garfield. Happy the parent or the teacher that can so inspire ! Happy the pupil that enters upon that path shining more and more unto the perfect day !

But we cannot hope that, by any means now in actual use, the mind and heart of the majority of the young can at any early day be so reached and shaped and fixed. The Sabbath-school teacher comes in contact with some of them one hour a week ; the faithful minister, with a still smaller number, one hour ; the average parent cannot or will not do the work ; the average teacher in the primary school, meeting nearly all of them, does more than these ; yet not enough. The ideal and the purpose with the majority of youth must be a slow growth rather than a sudden inspiration. The six years of grammar-school instruction and the three years of high-school instruction are imperatively needed for character training, as well as for intellect training. We must not think of less.

Here let me bear testimony to the good moral influence of the great majority of teachers of these grades

in our cities. Nobler men and women than some of them are not often seen. No missionary, toiling among the poor and the vicious, is more devoted. The average teacher in the public schools of every grade loves truth, loves justice, loves and reverences the children committed to his care, leads a pure and upright life, fears God and keeps his commandments, and sets a good example. I have rarely seen assembled a finer body of men than the masters of the high and grammar schools of Boston. The pupils who are under their care, as a rule, grow better as they grow older. I know that during the seven years I have been in Boston, the five or six hundred young ladies in the Girls' High School, thanks to my predecessors and to my subordinate teachers, have grown in grace as they have grown in years. Higher resolves, nobler aspirations, triumphs over imperfections and over petty selfishness, a loftier type of womanhood, have visibly marked their onward progress from year to year, and not one of them, I believe, has been lost.

One of the most alarming and distressing symptoms of the times is the prevalence of youthful criminality. We are told by persons who have investigated the subject, that in some cities half the crimes and misdemeanors are perpetrated by persons under twenty-two. Of those criminals who are older, most began their downward career long before. The criminal of twenty-five began to be a culprit at twelve or fifteen. I quote from a letter just received from a friend who has given special attention to this matter: "The Grand Jury in General Sessions Court in New York, in May, 1882, passed upon over 260 cases, and, at the conclusion of their session, made a presentment to the court in substance as follows:

that from their observation they were convinced that of all the criminals held for the action of the Grand Jury by committing magistrates, 75 per cent were between the ages of 12 and 18 years. Judge Cowing, of the same court, in passing sentence upon a youthful desperado, said that, from his observation, 75 if not 90 per cent of those convicted of crimes, where penalties ranged upwards of five years, were under 25 years of age." * The most critical age is the high-school age, thirteen, fourteen, fifteen; or fourteen, fifteen, sixteen; when body and mind are in a ferment with the wonderful changes that are going on, when nature compels attention to the new powers and unwonted desires that adolescence brings. Just at this time, more than ever before or after, there are needed right influences and right employments. Just at this time it is that the high school takes the youth of both sexes, gives them wholesome work to do, fruitful lessons of truth and purity and right to learn; noble examples, the grandest in history, to ponder; fixes their attention on the facts of the universe, the laws of man and of God; banishes far, or teaches how to overcome, the sins, temptations and diabolisms of life; presents to them, usually, specimens of upright manhood and pure womanhood in the teacher's chair; reminds them silently yet unceasingly that these bodies are the temple of the Holy Ghost, and that these souls, after patient continuance in well-doing, shall one day wear a crown. The high-school training conducts the pupil safely through this crisis, and guarantees him a life of honor.

But alas, the education of the great majority stops short of even the highest classes in the grammar school. He who ought to be learning science, language, history,

* Letter of Anthony Comstock to me, dated July 6, 1883.

government, good behavior, heroism, is withdrawn, by necessity or by choice, to labor in the house, the fields, or the shop. The moral influence of elevating studies and of upright teaching ceases. Instead of five or six hours a day of high precept, pure example, ennobling sentiment, conscious growth in knowledge, communion with the great souls of the past ; just 'at this period of life, the high-school age, when he most needs restraint and guidance, and steady mental employment of a healthful nature, the pupil is removed, all is changed. Evil companions swarm, and they fill the now vacant mind with unwholesome thoughts and deceptive dreams. A sense of freedom, a consciousness of new powers, the intoxication of new pleasures, fills him with reckless joy and the spirit of daring adventure. The blaze of new appetites and passions, hot enough at this age by nature, and perhaps set on fire of hell by temptations to vicious indulgence or by the infernal literature that meets the eye at every street corner, lights up as with auroral splendor this new voyage on the sea of life, and blinds him to all dangers.

“Fair laughs the morn and soft the zephyr blows,
While proudly riding o'er the azure realm,
In gallant trim the gilded vessel goes,
Youth on the prow and Pleasure at the helm,
Regardless of the sweeping whirlwind's sway,
That, hushed in grim repose, expects his evening prey.”

The disenchantment is speedy ; but the choice has been made ; the downward road has been entered ; and even the “little learning,” though, on the whole, vastly better than total ignorance, is often found to be “a dangerous thing.” It is not true that many criminals are graduates of high schools or colleges ; but it is true

that many a candidate for the prison, unhappily taken from school just at that time when he most needed its saving influence, can say with Caliban,

"You taught me language, and my profit on't is
I know how to curse."

They have learned "the three R's," nothing more ; Reading, and they imbrute themselves over dime novels ; Writing, and they forge notes ; Business Arithmetic, and in the words of a famous millionaire, "They cheats one another, and they calls that 'business'."

But some one will object that education in the high schools, and even in the upper classes of the grammar schools, encroaches upon the time that should be given by the majority of pupils to apprenticeship or training in some handicraft ; in other words, it does not fit a boy or girl to earn bread and butter. It is the objection not only of the born Dundreary, but also of the narrow money-maker, rich, rough, rotund, ignorant, who calls the masses "them asses," who prides himself on being a practical man, with whom wealth is paradise, poverty is hell, "plain living and high thinking" is the nonsense of fools ; the cook-stove is the palladium of liberty ; the golden eagle, the silver dollar, and the nickel cent are the trinity.

"The multiplication table is his creed,
His pater-noster, and his decalogue."

It is true that, with the important exception of industrial drawing, and, in some schools, of sewing, the public grammar or high school does not give dexterity to the fingers. What of that ? Such dexterity, sufficient for artisanship, can be acquired in a few weeks. Nay, by means of half-time schools, or industrial schools, likely to be established soon ; or, better, by systematic



manual training in all grades from the lowest up ; it can be gained simultaneously with mental discipline, and may prove a valuable auxiliary to that discipline. But if not so, yet the trained intellect, strengthened by study and sharpened by habits of nice observation in school, enlarged by knowing what this earth is and what it contains, and what man has done and can do and ought to do, will find, if he seek it, appropriate work with far more ease and certainty than if destitute of such training. For every well-educated man willing to perform manual labor but unable to find it, I will show you a thousand ignorant men in the same condition. It should be remembered, too, that the subdivision of labor has been carried so far, and the use of labor-saving machinery is superseding human muscle to such an extent, that the great need in workshops and manufactories is not so much hand skill as intelligence, versatility, directive power. The old system of apprenticeship is ended. Mental rather than hand dexterity, I repeat, is the need of the workshop. Apprenticeship in statecraft rather than in handicraft is the need of the nation.

To the proposition that a majority of the young should receive a high-school education, it will be objected that they will thereby be made discontented with their lot ; these educated gentlemen and ladies, it is said, will be disinclined to wash our linen, to curry our horses, to carry hods, to sweep our streets, to shovel on the railway, to wear corduroy, and to go barefoot. It is pathetically and tenderly asked, shall we educate them beyond their proper sphere, and so render them unhappy ? Is it not better for them to remain ignorant and patient and contented ? stupid, yet blessed ? It is the old argument of American slavery : the bond-man

is happy! Said one of these objectors to me, "Where ignorance is bliss, 'tis folly to be *otherwise*." But I thank God that education does make a man unwilling to be a beast of burden. There is nothing diviner than this discontent. Thus, and thus only, we rise in the scale of being. So far from a valid objection, the fact that a high-school education does breed a hunger and thirst for something better than mere oxhood and ass-hood, is an unanswerable argument in its favor. The aspiration is a proof of man's divine origin and of his upward destiny. Shame on him who thinks that the proper ideal of the humblest laborer is the condition of a contented brute. "In the image of God created he him." "The measure of a man, that is, of the angel."

But to the objection that a high-school education makes physical labor seem dishonorable, I answer, it is not true. The hardest working men are the educated men, and when they labor with their hands they add new dignity to labor; just as St. Paul did, when, for two years he worked at his old trade of tent-making; as thousands of highly educated Southern men and women did at the close of the war; as Cincinnatus did at the plough; as the accomplished waiters and servants do at the great summer hotels among these mountains, young men and young women, four hundred of whom, at the four hotels controlled by Barron, Merrill and Barron, are from high-schools, academies and colleges, Wellesley and Dartmouth and Harvard among them. The boy that blacked my boots an hour ago is a member of a high school, fitting for college. So have I listened with reverence and admiration to a lady, whose husband is now among the honored and influential of the land, a lady reared in affluence, with talents,

culture, and accomplishments that would adorn the highest social position in our country — I have listened to her with reverence and admiration as she told, not with shame but with honest pride, how she had sought out and performed, for many weary weeks with patient and ceaseless industry the work of a sewing girl,— embroidery,— earning with her needle ninety dollars in three months, that she might support that husband, whom years of severe illness had reduced to the depths of poverty. By such hands, the humblest physical toil is dignified, glorified. But why urge this point? It is a part of the instruction of every good high-school to inculcate a scorn of idleness and a hearty respect for useful manual labor, especially when brain is mingled with muscle.

I have endeavored to show that the time has come for a great advance in secondary education, and that there can be no reasonable security until the well-educated citizens shall be in a clear majority ; no absolute safety until the great mass of the people are wise and good ; that it is of the utmost importance, an indispensable means to that end, that the majority of pupils enter upon and complete a proper high-school course or its equivalent. How can this be done? How can the majority of our boys and girls be drawn into high-schools and kept there until their characters shall be ennobled, their intellects quickened and sharpened and broadened, and the rich treasures of learning and science utilized as a preparation for the arduous duties of citizenship? What shall be the process of this great educational revival, in the thorough accomplishment of which our freedom would find stability and perfection, the value of property would be increased, society would

be elevated, human happiness wonderfully promoted, and the burdens imposed by folly or wickedness sitting in the seat of power, would be lifted? This is the problem of problems.

Better school supervision will help, but it alone will not do it. Improvement in methods of teaching will help, but it alone will not do it. First, *catch* your young American, German or Irishman; get him into your school; then supervise and teach him.

Mere compulsory education will not do it. Compulsory education, or rather compulsory attendance at school, is already in force to a limited extent. Upon the whole it has done and is doing great good. In some few cases it works hardship; for it deprives the parents of the earnings of the boy or girl, and reduces the family to cruel distress. An attempt to force high-school education upon the people would work frequent and almost unendurable misery, unless some compensation for lost wages should be made to the parent.

But if it is true that the great and pressing need of our country is the right education of a majority of its voters, to the extent at least of a sound high-school course, surely some one among the multitude of our wise and thoughtful educators will find out a mode of meeting that want. With diffidence, and yet with confidence, I venture to suggest a plan which has not been tried. I shall be glad if a better can be found. It is briefly this:—

Offer to give at the end of each year or half-year, to the parent of every child that successfully completes a prescribed year's or half-year's work in the high school, a sum of money equal in amount, if need be, to the aggregate of the wages the average child would earn, if

kept at manual labor. The national Bureau of Education, or the State Board of Education, would find no difficulty in preparing suitable tests and prescribing the mode of examination, giving due weight to continued good behavior and fidelity in the discharge of daily duties. The general plan under which the Regents of the University of New York annually distribute many thousands of dollars to those academies and schools whose pupils pass a prescribed examination, that plan whose operation has been so beneficial in elevating common-school instruction throughout that great commonwealth, might furnish the outlines of one admirable method of procedure. There may be others.

Conceive of the effect that would be produced if fifty dollars in money were paid from the public treasury at the end of every half-year in the high-school as the reward of successful study and unexceptionable deportment. The increase of attendance might be slight at first, but it would steadily increase. How many a parent, that now feels it impossible to dispense with the earnings of son or daughter, would gladly avail himself of this opportunity, and, with this hope of coming aid, would submit, if necessary, to great privations in the meantime, in order that the unspeakable boon of a higher education might be gained by the child that is dearer to him than life! What a hold, too, would the teacher have upon the pupil, to secure his faithfulness and his good conduct! What a declaration to all the world of the exalted estimate placed in America upon the thorough education of our children! What a community by and by, in every American town and city!

Here is no violation of principle. We already furnish free high-school instruction, costing in Boston,

according to the official estimate, one hundred dollars per pupil. Prizes are not infrequently given for relative merit; these rewards would be given for absolute merit.

I know the instant response that will be made to my proposition. "An increase of the tax-bills—it must not be thought of!" A howl of opposition will greet every attempt to levy one additional dollar for the schools. Dismissal from office awaits him who proposes it; for there is an incredible short-sightedness in many tax-payers, an incredible timidity in many friends of education. We shall hear the exclamations on every side, "we are well enough off as we are," "we have too many high-priced school-teachers already," "the country will not bear it, the country will not bear it!"

But the country must bear it, or bear worse. The country is at this moment bearing worse. We are reaping every day the harvest which ignorance combined with wickedness has sown. Ignorant and reckless voters have saddled every town, city, state, and the whole nation, with burdens grievous to be borne.

The amount of taxes imposed by the city of New York for the year 1882, was \$27,684,427, being at the rate of \$22.50 on \$1,000. The annual interest on the city debt of New York is \$8,141,988. Fully half of this debt is believed by good judges to have been foolishly or fraudulently contracted. Fully half the taxes are the fruit of needless expenditures. They have no public high school in the city of New York, for that would be too expensive; but they had Wm. M. Tweed, who cost them \$3,000,000. The debt of the city of Boston is \$40,163,312; of which \$1,283,000 are war expenses, a needless legacy from the Southern rebellion. The rate of

taxation in Boston is \$13.90 on \$1,000, against \$22.50 in New York city. Eight dollars and sixty cents tax on a thousand is the excess which New York pays more than Boston, as the penalty for having no high schools. In the language of the lamented Lincoln, "To those that like that sort of thing, that's just the sort of thing they'd like." I need not state how many thousand millions we have already paid on the nation's war debt, nor how many hundreds of millions we are every year paying as interest on the same, and as pensions to soldiers and their families. Every dollar of it is paid in punishment of us for suffering the youth of this land to grow up without a thorough education. Who can compute the amount of taxes we pay directly and indirectly for pauperism, and crime, and demagogism, and junketing, and drunkenness, and foolish experiments, and extravagant expenditures, and wicked, because unnecessary, wars? And what assurance have we that the madness and stupidity of the past will not continue to be repeated? But draw the majority of youth of proper age into the high schools by liberal rewards, and the day is not distant when this heavy load of taxation and the far heavier burdens of dishonor will melt away. If the measure which I propose had been adopted by the American people fifty years ago, what misfortunes would have been averted! what heights of prosperity attained!

But I proceed to demonstrate by actual figures that the increase in taxes consequent upon the adoption of such a system of rewards would be very slight. The city of Boston has eight high schools with 1570 pupils. If every pupil had successfully passed through the year's work and a prescribed examination, and had received from the city treasury \$100 at the first of July, the ag-

gregate would have been \$151,000. The taxes collected by the city are over ten million a year (\$10,741,049 for the year ending April 30, 1882); the valuation, real and personal, is \$665,554,697. The increase of tax would have been but 20 cents on a thousand dollars. But there are in the city of Boston, according to the census of 1880, 17,597 pupils of the age of fourteen, fifteen, and sixteen years. Half of these, or 8,800, ought to be receiving a high-school education, according to our basis of calculation. If such were the fact, and if all of them should satisfactorily complete the year's work, and receive each \$100, the increase in the rate of taxation would be \$1.17 on a thousand: that is, instead of \$13.90, it would be \$15 $\frac{17}{100}$ on a thousand. An increase of \$2 on a thousand would certainly more than meet all the increased expenditures.

But suppose that, instead of municipal action, the State should take the initiative in this matter. Massachusetts has a population of about 70,000 of high-school age, that is from thirteen to sixteen years, or from fourteen to seventeen. By the last annual report of the Mass. Board of Education, issued in January, 1883, it appears that there are now 221 high schools in the State, with 19,256 pupils. If this number of students were increased to 35,000, half of all the high-school age, and if every one of the 35,000 were to complete successfully the year's work, and receive the hundred dollars reward, it would add \$3,500,000 to the aggregate of State, county, city and town taxes. This aggregate in 1882 was \$30,752,000 as reported by the Secretary of State. The increase would add between one-eighth and one-ninth to the total tax. If the tax bill were \$100, the increase by the proposed scheme would on the average make it about \$114.

But this is a matter of national interest. The number of persons of high-school age in the United States in round numbers is not over 2,200,000. Suppose that half of these were in public high schools, and passed the proper tests, and received each a hundred dollar United States bond, convertible into gold: the aggregate is \$110,000,000. Now the surplus revenue of the United States, arising mainly from taxes on the necessities of life, and for which the labor of the country is burdened, amounted for the year ending the first day of this July, in round numbers, to \$125,000,000; for the preceding year, \$150,000,000. It is a difficult and perplexing problem what to do with this surplus, which it appears to be the policy of the Government to raise. Apply it to education in the manner I have indicated; and if every one of the eleven hundred thousand boys and girls received each the hundred dollars, there would still remain an unexpended surplus of \$15,000,000 on last year's receipts, and \$40,000,000 on those of the preceding year; sufficient to provide the additional school-houses, books, apparatus, and teachers. It is entirely practicable, therefore, without incurring an additional dollar of debt, and without increasing any man's tax by the amount of a single penny, to do this great, this pressing, this indispensable work, and to do it with princely liberality. If the town, city, or State, paid the reward, the nation could, if need were, double the amount, and no tax-payer would be thereby burdened. Of course, the beginning would be comparatively small, as beneficiaries at first would be few; and the expenses correspondingly light. But let this surplus revenue coming, as it does in the main, from the mass of the people, be held sacred to the cause of the thorough educa-

tion of the youth of the republic, and a generation would not have passed before blessings unnumbered and immeasurable would follow. Why may it not be done? What senator, what representative in the United States Congress, shall be the fortunate man to stand up in his place, and to propose this great measure, and to engineer the needful legislation; to fight the hard battle that will surely come from ignorant men and selfish demagogues, and politicians with itching fingers; to push the column on to victory, and wear the immortal laurels?

Is it alleged that we cannot depend upon the permanence of this surplus revenue? Be it so. Even without it the burden would be inappreciable. For a moment compare any European nation with the United States: take the German Empire; it has a population of forty-five millions; we, of fifty millions. Germany spends directly upon her army and navy, (army, \$90,472,095, navy, \$109,814,410) two hundred million dollars a year; we, less than one hundred millions. The direct cost to Germany is a hundred million dollars more than to us. But the indirect expense of the German military system is more startling. Every able-bodied young man, high or low, rich or poor, must at the age of twenty, quit labor and study, and give three entire years to military training; not only so, but he must give to the same drill two months in each of the four following years. Something over 900,000 men, in addition to the regular army of 427,000 men, are thus withdrawn for three years and eight months from the pursuits of peace. It is safe to say that the probable earnings of more than 1,200,000 laboring men in Germany—at a dollar a day each, that would amount to \$360,000,000 a year—are sacrificed in this constant

preparation for war. Germany lavishes therefore on her war establishment, directly and indirectly, some four or five hundred million dollars more than we on ours. Cannot we, whose labor is twice as productive as theirs, spend for education an eighth or a quarter as much as Germany spends for war?

Let us have done, then, with the baby plea that the increased burden of taxation would be intolerable. It would not be felt at all, but would be borne by most taxpayers in utter unconsciousness of its existence.

Here, then, in the thorough education, first of the majority, and finally of all, is America's opportunity of speedy relief and of future safety. We have seen that the first great step in this process, at least for the Northern States, is to attract into the public high schools a sufficient number of children and youth; that the chief obstacle is the real or supposed necessity of applying to the support of the family the earnings of boys and girls, who ought to be gaining this instruction; that the sufficient remedy is *a system of pecuniary rewards* of successful study and good behavior, on so liberal a scale as to compensate the needy parent for the loss of the wages of son or daughter; and lastly, that America, fortunate in the unparalleled productiveness of its labor, and more fortunate still in its geographical isolation — no border lands on the east or west, two great oceans excluding all probability of hostile invasion, Mexico and British America powerless to harm—America can, without hardship, and even without self-denial, invest, in the promotion of sound education, a small fraction of the vast amount which the nations of Europe squander in preparations for war.

Let America but engage heartily and magnanimously

in this work, let her rise to the grandeur of this great forward step in education, and she will soon enter upon a career of business prosperity of which we little dream; and, though struggles with gigantic evils undoubtedly impend, and foes within and possibly foes without will wrestle with her in many a life-and-death grapple, yet, as surely as that the power at the centre of the universe works for righteousness, she will come forth victorious at last. That victory will not be won for herself alone. Source and centre of a better civilization than the world has yet seen, a government *by* the people — universal suffrage made safe by universal education — the American Union will be the pattern of the alliance that shall yet bind together all nations.

"For I dip't into the future far as human eye could see —
Saw the vision of the world, and all the wonder that should be;

Saw the heavens fill with commerce, argosies of magic sails,
Pilots of the purple twilight dropping down with costly bales;

Heard the heavens fill with shoutings; and there rained a ghastly
dew
Of the nation's airy navies grappling in the central blue;

Till the war-drum throbbed no longer, and the battle-flags were
furled
In the parliament of man, the federation of the world!"

V.

SCHOOL SUPERVISION.

BY HON. HENRY BARNARD, LL. D.

At the conclusion of an interesting paper, entitled, "A Brief History of Supervision," Dr. Barnard, by request of Gen. Eaton, related the following personal reminiscences.

This subject of "Self," Byron says, is one upon which "all can be fluent, but very few interesting." I don't flatter myself that I belong to that very few. Gen. Eaton has asked me, how is it that you who had been trained for a lawyer and for public life, and had given five years of preparation to the study of law and jurisprudence, yet gave up this preparation, and undertook this work in behalf of common schools? It happened in this way. I was in the Connecticut Legislature in 1837. Among the members was a most excellent gentleman by the name of George Sharpe, one of the best friends of education Connecticut ever had. During that season, he brought in a bill which provided for the supervision of schools in Connecticut, by paying school visitors the enormous sum of \$3.00 per day for the time they should give to the visiting of the schools. Mr. Sharpe came to me, and said, "I want you to help me carry this bill through: and you can bring me the necessary help."

On my assuring him of my support, he presented the bill, and I advocated it. It was carried unanimously. It went to the Senate, and was lost, nobody caring enough to advocate it. Mr. Sharpe again came to me when they adjourned, and said: "It is the habit of Connecticut to send her representatives back a second time. Now I want you to promise me that if you are in the Legislature in 1838, you will look after this educational bill." I assured him of my co-operation, as I felt that it was only part of what should be done for education in Connecticut. I was re-elected, and I again presented the bill, and after much urging had the happi-

ness of seeing the statute creating the Board of School Commissioners of the common schools of Connecticut pass unanimously both houses of the Legislature. To administer that law, we had then but one man in view, Thomas H. Gallaudet, one of the most advanced educators this country ever had. And when we met as a Board of Commissioners, we nominated Mr. Gallaudet as Secretary. To our astonishment he unconditionally declined. I was then urged to take the office myself, but in vain; my preparation had been for another profession. We then looked around again for a Secretary, and selected Judge Waldo, lately of the Supreme Court of the State. He was a teacher, and had great influence in the country where he belonged. On my nomination he was elected, but he also declined.

Again, I was pressed to accept the office, and on again declining they were on the point of adjourning, on the ground that they could not find the man. Not wishing, however, to see a bill, which I had introduced, and helped to pass, lost for want of interest in it, and believing that a State superintendent could do a great work for Connecticut, if he would labor faithfully, I told them that for six months I would consent to do the business of the office, and would during that time do it at my own expense, without pay. With this understanding they adjourned. Thus I took the office. In the course of time education took possession of me, and for forty-five years I have given all my time and all my resources to its advancement.

With respect to my personal connection with the school returns of this country, it came about thus: Getting no answer from Washington to my letters, I determined to make a visit there, and on the way had interviews with Mr. Packer, then agent of the Sunday-School Union, and also with Dr. Lieber. Dr. Lieber had published in 1835 a pamphlet, showing what items should go into the census; among others the whole field of charitable institutions, and a general view of the literary institutions of the country. Imbued with these views, and some plans of my own, I went to Washington, and had an interview with President Van Buren, who referred me to the Secretary of State, Gen. Forsyth, of Georgia. To the Secretary of State was assigned at that time the duty of preparing the annual census. I asked to see the census returns, and there was no subject and no item of teachers, or schools, or of colleges therein. I then asked whether it was not possible to

introduce the subject into the census ; and was told that the items were so numerous, they did not think I could ; but if I would prepare a schedule of what I thought should go in, they would see what could be done. My schedule was not adopted, however. Instead of taking the common schools as the principal element in education, the census officer merged all public, private, and parochial ; city and country schools were also all blended. Of course, the result was immense confusion. We did get in, however, an item relating to illiteracy ; and there began the foundation of an agitation which has not yet stopped in this country. We also got in a general idea of colleges and academies, but so general as rather to mislead than to direct the action of those who were to follow. But the ominous fact, that *ignorance* pervaded every State in the country—that dense ignorance of men and women—of men who were to become voters, and enough of them to send to perdition every honest man in the country ; that fact was for the first time brought to public attention ; and Mr. Mann, in a Fourth of July oration in 1832, sent forth a note of warning that echoed throughout the land. In every State of this Union, except Texas and Florida, it was also my privilege to present the same fact. With the returns of this census in my hands, I gave an address in every Legislature in the country. In nearly every city I had conferences with teachers, superintendents, and Boards of Education, and in nearly every instance they followed the line of policy marked out.

As to the establishment of the Bureau of Education, I may say that for many years our chief endeavor was to get education recognized by the general Government. The first attempt to bring this about was by means of educational associations. We found that with the old views which prevailed before 1865, the idea of getting the general Government to do anything more than merely collect and publish statistical returns was hopeless ; and therefore we must get live educators to unite, and let them employ a system of agencies by which the national results could be reached. At the same time efforts were made every five or ten years to bring the matter to the attention of the departments, and of the President, and Congress.

The subject was first taken up in earnest by the American Association for the Advancement of Education in 1849, subsequently by the National Teachers' Association, and finally, by the National

Association; a bill was then prepared by President White, of Ohio. I went to Washington ten times in the interest of that bill. It was defeated, however. Gen. Garfield then wrote me, "Come over to Washington and help us." He knew that I was acquainted with several Members of Congress who had voted against the bill, and who might possibly on re-consideration vote for it. I saw these persons; two of them did vote for it, and two stayed away. The bill passed the House. Here, however, comes the vital point, and one which is not generally known. The bill went to the Senate and to the utter astonishment of the friends of education was laid upon the table. On asking for the explanation, it was found that the best friends of education, Senators Fessenden, Sumner, and others, would not support it, because they were "not going to create an office for President Johnson to fill, as he would make the office a political one." Here was where prompt and vigorous work was needed, or the bill would be lost. A friend of President Johnson was Senator Dixon, of Connecticut; I went to see him. He said, "I will help your bill, but your best friends are against it." I told him what Sumner feared. Mr. Dixon thereupon went to President Johnson, and explained the bill to him; the President was somewhat opposed to the bill, but Mr. Dixon asked him if, before the appointment of an officer was made, he would allow him to present the names of persons who were not political, but were educational men—providing the bill was passed. To that extent President Johnson promised—that the appointment should not be political, and that when made he would consult Mr. Dixon, and other friends of education. On the assurance thus given, the bill was passed, and sent to the President. Shortly after I received a telegram from Gen. Garfield, saying, "Come over to Washington. There is danger of a veto to the bill." I went immediately, called on Senator Dixon, and told him if he wanted to save this bill, now was the time. He went to the President's room, who was then in the Capitol, signing the bills for the session, and on his table lay the sheet, creating the office of Educational Commissioner. Mr. Dixon called his attention to it, and the President remarked that it was a bad bill; it was assuming for the National Government duties that belonged to the States, while the National Government was to have no action in the matter. Mr. Dixon replied, "It is simply to perform the work every year, which the census undertakes to do every ten years; only to do it more thoroughly and completely

than the census can ever do it." The President eventually was persuaded to withdraw his objection, and he then put his signature to the bill. That is, in brief, the history of my connection with the establishment of the United States Bureau of Education.

The Present Condition and Needs of School Supervision in New England.

THE CONDITION AND NEEDS OF CONNECTICUT.

BY SUPT. S. T. DUTTON, NEW HAVEN, CONN.

Owing to the partial depopulation of many rural towns in Connecticut, and a manifest deterioration in the moral and intellectual tone of those continuing to inhabit them, the schools are very small, inadequately equipped, and poorly taught. Were it not for the valuable Institutes which from year to year have been conducted by the Secretary of the Board of Education, and the regular detachments of wide-awake young ladies sent out from our State Normal School, our country schools, as a whole, would have fallen far below mediocrity.

The average acting school visitor is not expected to bestow much time or interest on them, nor can he afford to do so for the meagre pittance allowed for such service. Perhaps it is just as well that he does not, for he possesses no authority in the selection and hiring of teachers, and can only make himself positively felt by the exercise of his power to give, or withhold, certificates of qualification. The conditions under which these schools exist are familiar to most of you. Small schools, inconvenient and uninviting buildings, young and untrained teachers, are the rule. Even under these circumstances, some good work is done, and beginnings in education are often made in the backwoods school-house, which, being consummated in high school or in college, furnish proof that both mind and character are often grandly developed under circumstances of isolation and difficulty.

Considered from an economic standpoint, the state of affairs in our small towns is little less than deplorable.

A recent statement of the Secretary of the State Board shows

that there are great inequalities in the division of school funds, and gross neglect of duty on the part of district committees, in furnishing suitable accommodations. The Secretary prescribes as a remedy for these defects, a change from the district to the town plan of organization, with fewer schools more centrally located, and transportation for those living in remote portions of the town. If, under such arrangements, competent superintendents could be employed for each group of from four to eight towns, we should see such an uplifting in the educational tone of the country towns as would cause the cities to look well to their laurels. As things now are, it is fortunate that school supervision in Connecticut does not begin and end with committees and school visitors. However much they may do in administering school affairs, and making houses tenable, the best educational results in the way of well-developed courses of study, artistic teaching, and healthful adjustment of school work are due to the superintendents and principals and I may add, those teachers, who have a voice in directing the instruction of one or more schools. As these persons are thoughtful, conscientious, and accomplished, so the schools under their charge are awake to the great movements of the times, and are working successfully under the impulse of cheerful and enthusiastic directors. Such I believe to be the case in many of our larger towns.

I will now outline briefly the kind of supervision which, in my opinion, is needed throughout Connecticut. In the first place, we want supervisors who have been teachers, who have stood in the ranks, meeting the difficulties and discouragements which all teachers have to meet, and gaining success as the result of patient and studious effort.

A second prerequisite is practical scholarship. I say practical; and I mean by this something more than a knowledge of books, isms and ologies. If a man's intellectual assets will inventory nothing more than knowledge, cut, dried and shelved, he is poorly prepared to be a living force in moving large bodies of young people. The person who directs the instruction in a school of several hundred, or in a system of schools of several thousand pupils, should live in the very currents of modern thought and life. He should not be so absorbed in the drudgery and routine of his office that his eyes are not open to all kinds of progress. He should apprehend clearly the demands which this electric age

makes upon the educator, and know how to meet those demands without doing violence to any well-grounded principles of mental development. He must know the laws which control the relation of mind and body, so that the treatment of each under his guidance may be well-balanced and symmetrical. His knowledge in these lines cannot, of course, be exhaustive — it may, however, be clear and comprehensive. This practical scholarship should include an acquaintance with the theories which have been wrought out by the great teachers of the past, and especially the new philosophy of child-culture, of which Froebel was the founder, but which is destined to achieve results in education of which he never dreamed.

A third element is the ability to mould and lead public opinion. This suggests our relation to the community at large; and certainly, no one can be strong unless he can rightly interpret public sentiment, and work here along the line of least resistance.

No special diplomacy is needed to set a community all aglow on the subject of education, if the right spirit and purpose are all pervasive in the schools, so that the children go home radiant with the joy of new discoveries, and proud of the approval they have won from conscientious teachers.

A fourth and final quality essential to efficient supervision is the power to direct and help teachers and pupils to accomplish their work with the least possible waste.

It should also include that sanctified common sense which can lay out a course of study that is definite, and, at the same time, realistic and flexible — one that has no smell of antiquity, but is rather instinct with life, and touches the new education at all points. Add to all this the readiness and fitness on the part of the supervisor to go into his classes and teach, and his success will be complete.

SCHOOL SUPERVISION IN MAINE.

BY L. G. JORDAN, LEWISTON, ME.

The laws of Maine specify the following points among the requisites of School Supervision.

“To direct the general course of instruction, to select a uniform

system of text-books, and furnish suitable school appliances; to determine what description of scholars shall attend each school, and classify them; to select qualified teachers for the several schools; to examine the schools, and inquire into the regulations and discipline thereof, and the proficiency of the scholars therein; for which purpose one or more of the committee shall visit each school at least twice in summer, and twice in winter."

We find here a conception of what are the requisites of good supervision, and a bestowal of sufficient authority for successfully performing the duties required.

Our law recognizes the fact that all these elements of responsibility and authority are necessary, and that, if either one of them is withdrawn, there can be no efficient supervision.

It does not, however, recognize this fact, that a division and separation of these powers also renders efficient supervision impossible. Accordingly a part of this authority is conferred upon school committees, and a part upon school districts. By this division of the powers of an office which in its nature is a unit, the force of its authority and the weight of its responsibility are sadly diminished, and the best results are never secured. By this division, one part of the law defeats another. Thus, with the exception of a few cases where the town system has been adopted, the sole power of hiring the teachers is conferred upon the district agents. At the same time the law recognizes the importance of a definite plan of work for each school, and requires the School Committee to direct the general course of instruction. But such action on the part of the committee is discouraged, and rendered well-nigh impossible, from the fact that however perfect their plans may be, they have no voice in the selection of the workers in the first place; and no power to continue in their positions, those who, out of the number selected, may prove competent to carry forward the work.

Again, the law authorizes the selection of text-books, and the furnishing of necessary school appliances; but here also it divides its authority, conferring upon the school committees the selection of text-books, and upon the districts the furnishing of school appliances. Thus while the committee can decide upon the text-books to be used, they cannot furnish them; neither can they furnish or require to be furnished a single map or chart, or any other appliances, however necessary these may be to the successful study of the subject.

Again, the law is very specific in regard to the examination, or inspection of school-work, requiring one or more of the committee to visit each school at least twice in summer, and twice in winter. But the chief advantages of inspection of the schools are lost by these divisions of authority. For, without a definite plan of work, suitable appliances, and carefully selected agents to execute the plan, there can be no intelligent and profitable inspection in any department of service. As might be expected, therefore inspection of our schools has become in many cases a mere routine, devoid alike of interest and profit. Each pupil makes his own plan of study, and the result is that the majority go over and over the same ground, and each term's work has very little relation to that which has preceded, or which is to follow. It is not surprising, therefore, that our local supervision is far from satisfactory. It is very difficult to get the best men to accept the position or to retain it if they do once accept it, since they find themselves so crippled as to render their best efforts in a great measure fruitless. Therefore, inferior men are often the only choice, and the schools are neglected. During the last year there were about one thousand terms of school in the State, which were not visited more than once by any inspector, and many of them not at all.

As a remedy for these evils we need first to put an end to this division of authority, and especially to the absurd separation of the power to select from the power to determine the fitness of teachers. All these elements of efficient supervision must be united, and the whole authority be conferred upon one board, before the results which ought to follow such expenditure of time and money can possibly be realized. The entire abolition of the school district system is the simple and natural solution of this problem. And this is sure to come; for, although like every other evil it dies hard, its final and complete overthrow is only a question of time. Other changes also are needed in the school laws of Maine. Our law-makers have recognized the value of the services of school committees and also of individual superintendents. They have accordingly authorized towns to elect a school committee of three members, or a supervisor, as they prefer. Therefore the towns of Maine are about equally divided between the two systems, two hundred and twenty-five having committees and two hundred and sixty-six having supervisors. The change from one to the other can be made each year if desired, so that a committee is liable to

be superseded at any time by a supervisor, and *vice versa*. This of course discourages the adoption of definite courses of study and often interferes with extensive and well considered plans. Some plan ought to be adopted which would remove the possibility of these sudden changes and would combine, so far as possible, the advantages of the committee and supervisor systems. This might be done by several of the smaller towns uniting to choose a suitable person as superintendent, who, under the direction of their committees, should have immediate charge of all the schools. In the larger towns and cities each committee could elect one of their own number for this purpose, or could employ a regular superintendent, as is now done with very good results in most of the larger cities of the State.

With a suitable arrangement of the supervisor system of the State the adoption by even the smallest towns of some definite course of study would be entirely practicable. This has already been done, even with all the existing disadvantages, in several of the smaller towns. As our law now allows towns to abolish wholly or in part, the district system, some have already done so. In several of these, through the influence of the Maine Pedagogical Society and the State Superintendent, a general plan of work for several years has been laid out and courses of study adopted, and the work thus far has been eminently satisfactory.

SUPERVISION IN NEW HAMPSHIRE.

REMARKS BY H. H. WARREN.

There is very little I can add to what has been said in regard to this matter of supervision.

We have in New Hampshire the district system; also what is known as a combination of the district and town system. As to the district system, it has, I think, reached a development downward in this State, perhaps more marked than in any other State in the Union. Out of three thousand schools in this State to-day, about four hundred have an average attendance of from zero to six; and about six hundred have an attendance ranging from six to twelve. There is no need to go into particulars as to the character of the supervision where the district system exists. It is as near a farce

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as it can be. The school superintendent does, however, take a good deal of care of things material. He spends nearly all his time in procuring that most undesirable of all things, uniformity of text-books. He also looks after the school property, and keeps the people of the town in sympathy with the schools. And that is where he does a work that cannot possibly be over-estimated. He is the strong bond of connection between the people and the schools. Therefore, I never would abolish the superintendent of schools in this State, nor the school committee. But so far as his work of supervision is concerned, it is as near zero as it can well be.

There is one feature in this system of combination which is unique. Our State has changed from an agricultural to a manufacturing State more rapidly than any other New England State. According to the census, not a single agricultural town in New Hampshire, during the last decade, held its own. With those towns which seemed to hold their own, it was owing a good deal to the villages of the towns. This naturally led to a good deal of jealousy between the villages and the suburban districts, and resulted in the enactment of the Somersworth Act; by which a village in a town or section of a town can organize itself into what is called in the Middle States a "borough." A borough has entire control over the educational interests, drawing from the town that portion of the school tax to which they are entitled, and electing a school board which has absolute control over all school affairs. Then the town elects a school committee, who also have charge over the outside districts. We thus have a dual supervision in many towns, the evils of which are very apparent.

Now as to the remedy; in my judgment we made a great mistake in not standing by Superintendent Dickinson and Agent Walton in their fight down in Massachusetts to secure supervision by union of towns. New England looks upon the town as the only political unit. The curse of the district system is that it makes of the district a political unit. It is individualism run mad. County supervision may not be possible in New England for a long time to come; but I think it is possible to get towns that are contiguous to combine; towns that can afford to pay two, three, four, five hundred dollars apiece; putting sixty or seventy schools in charge of a competent man, and then paying him a liberal salary.

The one thing we need above all others is for some competent

man to call around him certain men, to locate themselves in a place like Boston, and say to the graduates of Dartmouth, Yale, Bowdoin, "come to us with your splendid preparation, and for six months or a year we will drill you in your letters. We'll get control of two hundred, three hundred, or four hundred children and organize in the heart of Boston a 'training school,' and you shall teach with us, and we will saturate you with primary matters. Then you can go and take charge of the supervision of the schools in New England." To-day, I don't know of a town that is looking for a supervisor that can put its hand on the man who has had a professional training backed by a college education. There may be such cases; they are very rare.

SCHOOL SUPERVISION IN VERMONT.

ADDRESS BY A. F. LEAVENWORTH, CASTLETON, VT.

The school system of Vermont was not like the Grand Model of the Carolinas, concocted in the council chamber, but is the outgrowth of the felt needs of the people as formulated in the demands made upon the General Assembly, from session to session. It is ample in its provisions, and pliable in its adaptation to the wants of each community.

Each town, district, and neighborhood can have just such a school as its legal voters approve, and are willing to sustain.

The town system may be adopted, and thus all the schools of the town be placed under the control of a town committee, or board of school directors.

There are three distinct grades of school officers whose duties are supervisory: the State Superintendent of Education, the Town Superintendent of Schools, and the Prudential Committee.

"The State Superintendent shall devote his whole time to promoting the educational interests of the State, and shall visit every part thereof during each year, deliver lectures upon the subject of education, confer with town superintendents, visit schools with them, and furnish them blank certificates for teachers, and blank forms for collecting school statistics."

He also has the direction of county teachers' institutes and town educational meetings, and is authorized to "employ assistants to

give efficiency and interest" to them. He must make a report of his official acts to the General Assembly, "and a statement of the condition of schools, and of the expenditure of the school money therein, with such suggestions for the improvement of the schools as he deems proper."

The relation of the State Superintendent to the public schools of the State is wholly advisory. Authority over them he has not even the semblance of. Over the normal schools he has some authority as to the appointment of teachers, the courses of study to be pursued, the admission of pupils, the granting of State scholarships, and the graduation of pupils. Through these schools and their graduates he may wield an indirect but very potent influence over the character of the instruction given in the public schools.

"Town Superintendents shall visit each public school in their towns, at least once a year; shall inform themselves of the discipline and progress in study in such schools; advise the teachers, and adopt the necessary measures for the examination, regulation, and improvement in learning, of such schools."

For his services the Town Superintendent receives two dollars per day, subject to the approval of the Selectmen of the town. He may grant certificates to teach in his town, and may annul the same for cause

If he will, and has the ability to do so, he may exert a very great influence over the schools under his charge, by the exercise of greater care in the granting of certificates, by assisting the teachers at the opening of their schools, in the reduction of their classes in number, and by the holding of teachers' meetings, in which he may bring to their notice such new methods of instruction as may be introduced with advantage into their schools.

"The Prudential Committee shall keep each school-house in their district in good order, and if there is no school-house shall provide a suitable place for each school; shall see that fuel and furniture and all appendages and things necessary for the school are provided; shall appoint and agree with a teacher to instruct the school and remove him when necessary; and adopt requisite measures, not in conflict with those of the Town Superintendent, for the inspection, examination, regulation, and improvement of the school."

The authority of the Prudential Committee over the school is

well-nigh absolute. The only limitation is that the person employed to teach must hold a State, county, or town certificate. Except in this respect he can appoint and remove at his pleasure, though the courts may require him to show cause for removal.

He can provide all the appendages deemed necessary to the working of a good school. He may not only do this, but the law makes it his imperative duty. But there is no penalty for failure thus to provide for the welfare of the schools, and hence the majority are chosen under instructions to provide a cheap school.

Our school law not only provides for the kind of school needed, but also grants almost unlimited power and money for the proper furnishing of the schools. And now what is the result? I answer that in this very liberality rests our poverty of results.

A trite proverb reads: "What is everybody's business is nobody's business." The details of the provision for the support of the schools are left to the primary meeting. This is the truly democratic way, but it does not work well, because the average voter is not qualified to judge of these matters. With him it is too often a question of expense merely, above which he is not able to rise.

He distinguishes not between the value of a good teacher and a poor teacher; hence his vote is determined by the amount of tax to be raised, rather than by the results that should be sought in the well-trained and carefully-developed minds of the pupils; hence the office of Prudential Committee which is by law made the most important in our school system, has often been degraded to be the most beggarly and niggardly of all offices of trust, by the action of the primary meeting, so that it commands no respect, and is passed around to whomsoever will accept it for the year, with strong injunctions to incur as little expense as may be. The consequence is that young, inexperienced and incompetent teachers are employed. From this practice our schools suffer more than from any other cause. Yet it is more the result of ignorance than of intention that the primary meeting thus treats the office of Prudential Committee.

Our Vermont yeomanry need only to be shown the better results attainable in the improvement of their children in learning, and none will be found more ready to vote large appropriations to secure a continuation of those results. I have known a district, in jest, to elect a bashful, retiring man to the office of Committee.

He read the law and resolved to do his whole duty. The old, dilapidated school-house was repaired, and tastefully painted within and without. The school-yard was enclosed by a fence, shade trees were set out, modern school furniture was purchased, maps, globes, black-boards, and "all appendages and things necessary," were supplied. Then the best teacher he could obtain was employed at her own price.

The district at first winced under the prospect of the taxes necessary to meet the expense of these innovations. But they knew that they had no redress, for the Committee had unlimited liberty in the matter, so they quietly submitted and awaited the issue.

Very soon they awoke to the fact that they had the best school-house in the town, and what was better, the best school. The children began to take pride in their school and were incited to greater diligence in study. The patrons caught the inspiration from their children, and not a murmur of discontent was heard because of the expense.

I have seen a town superintendent apply himself with such conscientious devotion and honesty of purpose to the discharge of the duties of his office, that the schools of his town have been lifted to a higher plane of activity. By the wise performance of his duties he has won the respect and confidence of the community, and he has been retained for years in the office, not for the emoluments thereof, for these were of a losing kind in a pecuniary point of view, but from very love of the self-sacrificing work. But these instances are exceptional. The majority of our School Committees and Town Superintendents are busy with other callings, and have no time, inclination, or training for the discharge of the function imposed by these offices, which are generally thrust upon them unsought.

We are therefore compelled to admit that much of the money spent upon our schools is worse than wasted, because of incompetent instruction, but more from the lack of wise supervision.

What we need is the highest order of executive ability and tact at the head of all our school interests. The same worldly wisdom must be exercised here as in the management of all other great enterprises. For the head of a large mercantile firm, a banking house, a manufacturing corporation, a railroad company, the highest executive ability, attained unto by years of faithful service in the business to be directed, is sought out and secured by the pay-

ment of high salaries. Success in the practice of the law, or of medicine, or of the gospel ministry even, does not qualify a man to direct the management of a school.

A man may be very good and honest, and really desire a good school, and yet be entirely incomplete to have the oversight of one. Often, such a man cannot tell a good school when he sees one. To be fitted to supervise the work of others, one must be an expert in that work himself.

The abolition of the district system is a step in the right direction, but only a step. It secures better schools in so far as a Town Committee is likely to be selected with greater care than are District Committees. The Town Committee also has the advantage in that it is made the judge of the qualifications of the teachers employed.

The State Superintendent cannot perform the duties of a supervisor for the whole State. The Town Superintendent, especially in the sparsely settled towns, has not a jurisdiction covering an area large enough to warrant the employment of a man possessed of the requisite ability. County, or District Supervisors might be appointed, the extent of their jurisdiction being based upon the number of schools therein.

My conclusion, then, is that the one great need of our schools is competent, well paid and responsible supervisors. We need laws to provide for such supervisors, and laws so framed as to secure the faithful and impartial performance of the duties imposed by them.

VI.

THE DUTIES OF A SCHOOL SUPERINTENDENT.

BY DR. A. P. STONE.

The particular discussion of school supervision proposed in this paper, will relate principally to the duties of the superintendent, as exercised in cities, towns, and districts. It is not my purpose to argue here the necessity of school supervision ; although an examination of the work to be done by a superintendent, may fully show the need of such service. The question of school supervision is justified on the same grounds as is the need of a directing head in the business affairs of life, where various duties and operations are to be performed by a number of persons, thus necessitating a division of labor, and where harmony and co-operation are necessary for the attainment of the best results. It is not the amount of force or effort put forth, that alone determines the measure of results, but rather the wise direction of that force, and the judicious adaptation of means to the end.

In New England, and elsewhere generally, I think, the superintendent is not a member of the School Board ; but rather their working agent, deriving his powers from them through their rules and regulations, and special votes. While in some matters he is entrusted with considerable discretionary power, in others,

his action is subject to their approval, and to them alone he is responsible. His duties are neither few nor wanting in variety, and they extend to almost everything and everybody pertaining to the general conduct and management of the schools.

What can a superintendent do, what does he do?

Foremost, in importance and frequency, among his duties, is that of securing teachers for the schools. It has now come to be pretty generally recognized that the difference in schools is substantially the difference in teachers. And how great that difference is, some of us know to our frequent regret and sorrow. The great waste of money in poor teaching is positively alarming; and when, in comparison with their expense, the schools are sometimes found disappointing, there can be no wonder that sharp criticism follows; although the fault-finders themselves may not, and do not, always know wherein the cause of failure consists. It is the duty of the superintendent to remedy this great evil. He is supposed to know what good teaching is, in what it consists, and what are the qualifications and qualities in the teacher that promise success in the school-room. It is his duty to seek out persons possessing those qualifications and to secure them for the teachers of the schools entrusted to his charge. No person can better afford, than can the superintendent, to ignore all considerations of locality, politics, sectarianism, charity and friendship, and to insist upon first-class ability for the work of teaching. In no other way can he do so much for the schools, and probably no other person connected with the control of the schools can do it so well as can he. In this respect his high and responsible duty may be regarded, also, as a privilege.

A second important duty is the grading of schools and providing them with a course of study. No one acquainted with good school work can fail to recognize this as a factor of prime importance in the successful conduct of schools. If well done it is largely helpful toward the best results; but if poorly done, or not done at all, there follows a waste of time and labor, in addition to poor and unsatisfactory work. There are schools that are graded with the mathematical precision of a checker-board, and furnished with a course of study of corresponding exactness. By some, graded schools are thought to be mechanical; and under such circumstances it is not difficult to see that they are quite likely to be so. But the grading of schools and school-work, as I understand it, means the classification of pupils according to their ability and proficiency; the assignment to them of work suitable to their capacity, placing them in charge of teachers specially qualified for their management and for that kind of work; and providing a course of study, more suggestive than mandatory, particularly adapted to the wants of those by whom it is to be used, and so flexible that in the hand of a teacher of good judgment and skill it may meet the wants not only of the average class, but of all the members of the school. Such a work requires some knowledge of the principles of education, experience in teaching, and good judgment. The judicious grading of schools produces results that never fail to be appreciated by an intelligent public.

Superintendents are not unfrequently called upon to make a selection of text-books, or to give their judgment of the merits of such books. In the best early primary teaching, text-books are but little used now,

and all good teachers do their work more independently of the book than was formerly thought practicable or desirable. Nevertheless, text-books have a place in school work, and that superintendent does his duty best who points out their necessity, for the most part, for both pupil and teacher; who recommends the selection of those prepared in accordance with educational principles and adapted to practical school-room work; and who gives teachers judicious advice how to use them; what to use, what to pass over lightly, and what to discard altogether; for as yet we have few, if any, text-books from which have been eliminated all the non-essentials of the subjects to which they relate.

But the principal field of labor of the superintendent, the one which occupies largely his time and thought, and where his personal influence is more immediately felt, is the school-room. Here his duties are most numerous and varied. At the opening of the school year, and of each term, his early appearance in the school-room enables him to respond to the various inquiries of the teacher that may arise upon the resumption of school work. He gains personal knowledge of the condition and wants of the school, whether crowded or otherwise; whether supplied with books and other appliances for work; and gives advice concerning any promotion or re-classification of pupils, changes of text-books, or variation in school work, that may seem desirable. In fine, his purpose here is to assist the teacher in every way possible to make a good beginning, and to assure himself that such is likely to be the case. Subsequently frequent calls, as they may be termed in distinction from visits, are made, when the teacher has renewed opportunity for asking for information or advice, and

when the superintendent, entering the room unannounced, receives impressions of the order, discipline, habits of study, etc., of the school, as well as of the temperature and ventilation of the room as managed by the teacher and janitor.

The more protracted visits to the school by the superintendent are made with various objects in view. As an observer he has an opportunity to gain a good knowledge of the ordinary working of the school on the part of both teacher and pupil, after making due allowance for some restraining influence of his presence in the school-room. But this influence should never be great, and will be reduced to a minimum, and perhaps disappear altogether, if the superintendent shows by his bearing, his sympathy and hearty co-operation with pupil and teacher, that he is present as a helper, rather than as a censorious critic. During these visits he becomes acquainted with every teacher's ability for management and discipline, and with the peculiar methods of performing that work ; notes the character of the teaching and of instruction upon general subjects ; observes the relation existing between teacher and pupil, and the conduct of pupils in school, upon the play-ground, and in the street. An estimate is also formed of the teacher's moral influence upon the school, in the inculcation of sound principles, in securing good habits and conduct, and in the development of character. He also observes whether the spirit of the school-room is cheerful ; whether there are signs of work and despatch ; and if the pupils are encouraged to cultivate a proper degree of independence and self-reliance. There are many other minor, though none the less important, duties devolving upon the teacher in the care of the

school and school premises, that the superintendent will be called upon to notice. Visits of this kind may be called visits of observation and inspection.

At other visits the superintendent, instead of being merely an observer of school work, wishes to make a practical test of it. To ascertain how well pupils can think upon their feet, he gives them an oral examination. To test how far their knowledge has been made available, and their skill in expressing their thoughts in their own language, he gives them a brief written test. Such tests, when made upon the completion of a branch of study, or of a proper division of it, or when occurring at the close of a term, or of a school year, may cover more ground, and may then be called written examinations. But the superintendent who makes, encourages, or allows frequent and lengthy written examinations, exceeds rather than performs his duty. During these visits he has a good opportunity to show the teacher and the pupils his method of teaching and of handling a class; and for this purpose he will generally conduct the recitation which the teacher has in hand at the time. Brief and spirited remarks to the school upon their work and conduct, and upon live topics of current interest, if made with good judgment and tact are always profitable. Any variation of school work in this way is usually suggestive to both teacher and pupil, and an agreeable relief to the ordinary routine of school.

Upon the occasion of his visits to the schools, as well as in his office also, it is the frequent duty of the superintendent to advise kindly with the teachers in regard to errors in management and instruction; to watch carefully such cases to see that those suggestions are car-

ried out, giving meantime to the teachers all needed support and encouragement. It cannot have escaped the notice of those who have had the practical oversight of teachers, that many beginners in the work, especially if young, are often upon the very verge of failure ; and that some, if left to themselves are obliged to relinquish teaching with sorrow and disgust ; but it is also equally noticeable, that if such persons are kindly taken in hand and counselled, their mistakes pointed out and improvement suggested ; that if they can be encouraged to make further and better efforts, they often become the best teachers to be found in our schools. They succeed because of their willingness to make greater and more prudent efforts ; for prudent effort does much towards the accomplishment of good results in school, as well as elsewhere in life.

Difficult cases of discipline, and an unpleasant relation between parents and the teacher or school, not unfrequently call for the advice or interference of the superintendent. His action in such cases, if timely, and characterized by wisdom and firmness, saves much bitterness of feeling on both sides, and much harm to the school. The whole subject presents an admirable opportunity for the superintendent to show his power as a peacemaker, and a dispenser of even-handed justice.

Superintendents do some of their best work in teachers' meetings, where all the teachers under their charge are assembled for the discussion and consideration of matters in which all are interested ; or when they come together by grades to consider work specially belonging to those grades.

I know of no department of public-school work, where an intelligent and active superintendent is more needed

than in a radical investigation of the sanitary condition of our schools and school premises. It is a shame to our civilization, that a subject so vitally connected with the welfare of the schools, and of the human race, should be so little understood, and so persistently neglected. To me it seems the height of presumption, that we ascribe the death of so many children by scarlet fever, diptheria, and other zymotic diseases wholly to the inscrutable ways of Divine Providence ; when in justice it should more properly be charged to the inexcusable ignorance and criminal neglect of those who build, and have the care of, houses where we live and send our children to school. The superintendent, from his daily observation of this state of things, and from the position he occupies, receiving and having access to a large amount of school literature, and being in correspondence with some of the best sources of information upon the subject, can, if properly seconded, do much to bring about a needed reform in school sanitation.

The duties of the superintendent to the school board, or to the school authorities by whatever name, are easily inferable from his relation to those authorities heretofore alluded to. Whatever information they may need for their action concerning the schools, it is his business to furnish ; and it is also his duty to call their attention to such legislation as he may deem necessary for the schools. This is done in his frequent interviews and conferences with them, as well as in one or more formal reports during every school year. He also becomes the medium of communication between them and the schools, attending to the carrying out of their behests, and keeping them constantly informed of the school's work and progress. By thus laboring under their di-

rection, and with their co-operation, there results a greater unity to the system of schools, and a more equal distribution of school appliances and privileges. In this connection it is frequently possible for a superintendent to make suggestions concerning the financial management of the schools, that may tend towards economy in their support and management. It is always in the line of his duty to endeavor to secure improved school buildings and accommodations, and in this respect, I think it will be acknowledged that intelligent superintendents have done a good work for the schools and for the people.

No faithful superintendent can be indifferent to his relation to the public to whom the schools belong, and who bear the burden of their support. He can see that their money is well expended ; that the best privileges possible are furnished for their children, and that the rights of the children and of the public are properly respected. In his office, on the street, and everywhere, whatever information he possesses, whatever encouragement he can give, whatever spirit of accommodation and courtesy belong to his position, should be cheerfully used for the benefit of the people.

The circumstances of the schools will, of course, modify somewhat the superintendent's duties. In large cities where more than one person must be employed, there will be a division of labor ; while in small communities the character of the schools may require some service that I have not mentioned. An excellent plan to secure the advantages of a superintendent, has, within a few years, been adopted in Massachusetts, where the same superintendent is employed by two or more towns, each too small to occupy the whole time of one

person. This is an economical arrangement, and one that can be profitably adopted in sparsely settled portions of the country.

I have thus outlined briefly some of the principal duties of a school superintendent. The list might be extended in the number of topics, and in fullness of treatment; but brevity is not accounted a fault in papers, on occasions like this. In sketching this outline I have not drawn my material from a theoretical explanation of the educational field; but have given the results of my own experience as a superintendent in an average sized city, and from some observations among associate workers in similar fields.

To render more complete the general discussion of Supervision for New England, of which the preceding paper is a part, it may be stated briefly, that the supervision of the schools of Massachusetts rests, so far as authority goes, entirely with School Committees elected in the different towns and cities by the direct vote of the people. The board consists of three, or some multiple of three, one-third of the members being elected annually, and each person for a term of three years.

This board is required to make to the town or city each year, a report of the condition and needs of the schools, and to forward a copy of the same to the State Board of Education. The school committees may perform all the duties of supervision, or they may delegate a portion to a superintendent, provided their respective municipalities authorize them to employ such agent.

All but four of the cities and many of the towns have

superintendents. Beside this officer, the City of Boston has a Board of six Supervisors, each performing the duties of superintendent. The State Board of Education with its Secretary and agents exerts considerable influence upon the schools ; this it does chiefly through its advisory character. The Board has entire control of the Normal Schools for training teachers. The Secretary and agents of the board conduct the teachers' institutes, and do the principal part of the teaching in them, while the agents, of which there are three, employ a large portion of their time in the examination and inspection of the schools.

Under the form of supervision which prevails in most of the cities, and in some of the large towns, the schools are making gratifying progress. Rational methods of teaching and discipline are steadily gaining ground. Under the system of supervision by school committees alone though the material interests are pretty well looked after, and the pride in the schools is kept up, it is well known that formality, routine and repression are the rule.

What is now demanded is superintendence for every town large and small, by experts, persons who have made the history and the science of education a careful study, and who have also acquired skill in the practice of teaching. This form of supervision appeals to the judgment of all who apply business principles to school questions ; it works well in practice, and as a method is making rapid progress. ED.

[For further discussions of School Supervision, See Address of Emerson E. White.]

VII.

ON THE RELATION OF THE COLLEGE TO THE COMMON SCHOOL.

BY W. T. HARRIS, CONCORD, MASS.

In the United States, there does not exist what may be called a national system of education. Even in the several States, individually, there is not to be found such a thing as a State system of education, which includes all descriptions of schools as members of its organism and stamps them all with its policy and methods. A thorough State system would have supervision and control of all species of schools and would co-ordinate or subordinate them in such a manner that each grade found its place and special function anticipated and provided for by all the others. Our national principle of local self-government does not permit anything of this kind.

While the State establishes and maintains two grades of schools, common schools and high schools — and in some cases three or more grades, it permits and encourages all kinds of private enterprise in education, especially in the direction of higher education, and in the majority of cases leaves to religious denominations and private corporations the business of providing all of the college and university instruction.

It may easily happen that under these circumstances antagonizing tendencies will arise. The elementary

schools may form their courses of study in such a manner as to fit their pupils for a higher education different from that which colleges actually furnish, and if the colleges refuse to modify their course of instruction in such a manner as to adapt it to the preparatory course given by the common schools then the common schools by adherence to their chosen curriculum will lead their pupils into paths that will not conduct them towards higher education. The result will be to diminish the number that receive a higher education in colleges.

College education should mean the production of directive intelligence. To decrease this sort of production is directly suicidal to the highest interests of civilization.

This is a matter of concern to us all ; but it does not follow that we can lay the blame on the management of the colleges, because they have declined to re-adjust their own curriculum so as to correspond to the modification in that of the common schools, although it would seem that those who preside over higher education should be the first to perceive the necessity for modifications of any sort demanded by the age, and to make proper provision for them. But while it would appear that the directors of the common school are most likely to be in error in this matter — as they are most likely to comprehend less profoundly the necessity of the age and the best means of meeting its demands — it is true that a necessity of the age makes itself felt first in the lower strata of society, for the very reason that they are under the sway of immediate impulse, and are not in the habit of submitting their impulses to a severe cross-examination in the court of reason. Such cross-examination is wont to suppress entirely the manifestation of

a new instinct, as something abnormal and capricious. For the new instinct can give no account of itself. Hence comes the possibility of error on the part of highest culture and self-conscious directive power. It may stand in the way of a needed reform. As a matter of fact, it always has fallen into this error, and is always doing it again. It is a blind conservatism opposing the revolutionary tendencies of a blind radicalism. A rational conservatism should systematically investigate the grounds that have caused to exist the present systems and methods, and likewise the causes of the manifestation of any and all revolutionary tendencies. This two-fold investigation is indispensable to able directive control of affairs.

It may happen that the result of such two-fold investigation would establish the wisdom of the colleges in maintaining the traditional disciplines in Latin, Greek, and mathematics, as the only appropriate basis of higher education. In that case the directors of public education would be proved to be in the wrong as far as they have failed to make preparation for the higher education as it exists.

The colleges, too, under such circumstances would be justified in founding and encouraging special preparatory schools. Those who are to receive a higher education would thus be separated from other youth even in their primary and secondary education.

But such isolation of the classes who receive higher education will tend to destroy that complete sympathy and appreciation of motives and springs of action that exist where youth grow up together in the same schools. The caste feeling effects a sort of blindness towards the moral status of one's fellowmen, and destroys the ability to explain their actions.

Here, it seems to me, we have the vital problem of relation between colleges and common schools. It concerns the question of the usefulness and desirability of college education altogether. It concerns the welfare of the great masses of our citizens who being called to greater and greater undertakings in life shall find perhaps that the common school education does not suffice as a basis of for a higher education, nor for the mental training necessary for the direction of their enlarged business spheres. Unprepared for great combinations, or for taking a survey of large perspective, their very prosperity leads them to failure. Mounted on their waxen wings they shall find themselves tumbling into the sea of bankruptcy and ruin.

If the theory of higher education implied by colleges and universities is the correct one, why should it not be regarded as a matter of great importance for the entire community to understand its grounds, and appreciate its value? Why should there not be sufficient exposition of the peculiar nature of classical study, for example, to convince all intelligent persons of its necessity as a foundation of higher education? Why should not public opinion be enlightened in such a manner, that it will demand a modification of the course of study in the common schools; and an adaptation of it to the ideal standard of the best education? Is it because the directors of our higher education are satisfied with present tendencies and results? Or is it because there is a well-settled doubt in their minds as to the tenability of their position?

The friends of common schools have the same vital question to consider; have they built wisely or foolishly? They have connected the high school with the

grammar school, and the grammar school with the primary school, and made them parts of one system; but they have departed from the course prescribed by the college for preparation, by establishing a so-called "general," or "English" course, which is elected by three-fourths or even nine-tenths of the pupils. If Latin and Greek furnish the best training to discipline and strengthen the mind, they ought to be studied by all pupils in the high school, it would seem. Why then should not the people modify their common school instruction so as to make it preparatory for the college course as it now exists?

To these questions we sometimes hear the response that higher education is only for the few; the professional men who are to be lawyers, clergymen, doctors of medicine, or teachers. These classes need a special training, as a sort of Brahmin caste, while the rest of society needs only a sort of general practical education. According to this view of the higher education as fitting its pupils for narrow special functions, and not for the direction of the common pursuits of life it should seem a good thing that obstacles are placed in the way of those who seek higher education in colleges. Colleges in that case are doing too much, rather than too little of the education; they are overstocking the professions on the one hand, and turning out half of their graduates to enter business for which they are confessedly not educated.

If the higher education of the colleges claims to be the best training of individuals for all kinds of large directive power, it is evident that it should attract as many youth as possible. It is evident that a course of study in the elementary and high schools that does not prepare youth for college, will in that case be a public evil.

Again, granting the usefulness and necessity of higher education, it is supposed by some that sufficient provision is made for those who desire to enter college from the common schools, by splitting the curriculum of the high school into a general and a classical course ; but even this requires the pupil or his parents to have settled the question of higher education four years in advance of his entrance of college, and renders it very difficult for the pupil who has taken a general or English course, and at a late period become interested in further culture, to change his mind and prepare for college. For he must now go back, and enter classes with pupils two or three years younger than himself. In the case of the special preparatory schools the evil is still greater. In them the divergence of the English course from the classical preparatory course begins two or three years earlier than in the common schools. There is, therefore, still less encouragement for such changes of purpose, if the special preparatory school becomes the sole, exclusive means of fitting the pupil for entrance to college.

The arbitrary choice of the parent or pupil, therefore, determines for or against a college course, for the most part, years before the entrance to college, and even years before it is determined whether the pupil has developed or will develop tastes or inclinations in the direction of college studies.

Meanwhile there goes on a constant war against the traditional college course on the part of the advocates of science and history, answered only by haughty assumption on the part of the directors of classical education. The latter have the field, and do not condescend to do any proselyting. But the opposition is large and

continues to grow. It has the common school system on its side, and is active with the help of large endowments in building up polytechnic schools, art schools, manual training schools, and agricultural colleges. Herbert Spencer's ideas on the study of dead languages, are endorsed as fundamental principles, and distinguished writers speak of classical study as the "college fetich." It is perhaps quite difficult to state the true reasons for higher studies in language addressed to the public at large; but are the colleges and universities able to give a scientific and satisfactory account to themselves of their preference for Latin and Greek over natural science and modern literature and history?

If this matter were taken up in earnest, no doubt the net result of the arguments would soon find expression in popular phrases and polemical mottoes that would carry the justification of classical studies to minds of all grades of culture.

There is no consideration that will in anyway lessen the responsibility of the directors of the higher education in this matter, or excuse them for their indifference towards the proper enlightenment of public opinion on this subject.

To the directors of public school education on the other hand, as well as to the advocates of the so-called "modern" course of study in education, it must be said: weigh well the question of higher education as a means of developing directive intelligence. Considering the first place the educative effect on the pupil of association in a good school with companions of the same class, and of higher or lower classes. Consider next the nature of the studies pursued; noting their effect as giving insight into human life, or into the workings of material nature.

The youth grows in insight into the world ; and in his ability to direct his activities in relation to the world by associating with his fellows. This is a practical education, because it is acquired by doing and by seeing others do.

The first phase of this practical education is that of subordination of self to higher control — the habit of working in a subordinate position. The pupils of the lower classes of a school live and work in the constant exercise of a feeling of respect and reverence for the members of the higher classes. Finding their daily tasks in the elementary branches of instruction to be so difficult as to require their full strength to cope with them, the acquired power of older pupils in higher classes which masters with ease the lessons in more advanced departments of study, seems akin to magic. There is no situation in life where differences in intellect appear in such imposing perspective as in the school-room.

The spectacle of intellectual growth in one's fellow pupils is perhaps the most valuable of school influences. The most hopeless state of mind for education is that one in which the individual declines all effort at mastering a new study, saying : " I have no mental capacity for it. I was not made for such things." The sight of whole classes of pupils constantly passing on from one stadium of progress to another, without seeming to meet with serious obstacles, is stimulating to the individual. Others now far beyond him, and successfully encountering what seem to him insuperable obstacles, were, a year ago, where he is now. On the other hand he is successfully meeting difficulties which he knows are entirely too great for the strength of classes a year's interval behind him.

This scholastic experience in the possibility of overcoming gigantic obstacles through the simple process of plodding industry and the culture that grows from it, is, in itself, a great moral lesson which underlies intellectual culture. When one has learned it, nothing seems impossible of accomplishment in the realm of erudition or insight. The best part of this lesson, it is manifest, comes from the spectacle of achievement which the pupil beholds in classes advanced beyond his grade.

The pupils of the highest classes in any school receive a kind of homage and respect from the lower classes, paid to them as a tribute for work that has been actually accomplished, and for strength manifested. While this homage and respect is health-giving, in so far as it produces a proper self-respect, and an ambition to gain honor for worthy achievements in mental culture; on the other hand it is not sufficiently balanced by a corresponding reverence and respect for fellow pupils, who have advanced beyond them, and entered on new studies in higher institutions. The highest class in a school is unfortunate in this respect that it is deprived of the health-giving presence of superior classes. It happens, therefore, that the moral tone of pupils in the highest class is liable to become depressed by the growth of an empty conceit in the place of the healthy tension of intellectual industry.

The pupil on leaving the grammar school at the age of fourteen, and entering the high school, finds he is transferred from the high place of honor and respect to the comparatively humble position of new-comer into the lowest class. This change has a tonic effect upon him; it braces up his moral purposes; fills him anew with feelings of respect and reverence for higher

achievement. It turns him from the contemplation of weaker companions to the salubrious occupation of gazing upon and emulating his fore-runners. All the strength he has

“avails

To hunt upon their shining trails.

On and away, their hasting feet

Make the morning proud and sweet.”

The spiritual history of the pupil in the elementary school is repeated in the higher school, but with variations. The course of study of the lower school deals with beginnings; with summaries; with net results; but not with the genesis or unfolding of the rationale of results and principles. Consequently the acquirements of pupils in the elementary stage are of the character of conventionalisms; isolated pieces of information, lacking coherence and vital relations. The studies of the high school, dealing, as they do, more with the vital relations of things, give insight and a power of independent thinking to those who study them. Accordingly, pupils of the high school are a step further removed from the unhealthy influence of conceit at their acquirements, when they reach the graduating class. The average age of high-school pupils at graduating, is eighteen and one-half years. Still three more years are required to reach maturity of bodily growth, and the moral strength of character that should accompany it.

If we compare the high school graduates who close their school career at graduating, with those who enter college, we shall find a greater contrast than that between the grammar school graduate and the beginner in the high school. To the elements of conceit which arise on account of the admiration of fellow pupils less ad-

vanced, is added the confidence that arises from the mastery of a graded course of study ten or twelve years in length ; and (more important than all this), there is present a pride of intellect which arises from the first use of the independent power of thought. What the culture given by the sophists was to the Greeks in the period just before Socrates, the last two years of high-school education are to its pupils. The power of individual reasoning ; the strength of grappling independently with questions ; the art of discovering grounds and reasons for opinions or convictions ; all these begin to develop at this time. The debating society, the art of making the worse seem the better reason ; this is the genuine school of the sophists. It is the empty vanity of intellect which cares not for truth, but delights only in its personal ability to subdue others.

For this moral reason it is more important that the high school should regard itself in the light of a preparatory school for college, than that the grammar school should train its pupils to look forward to the high school. The third mediation — that of the college — in which the pupil enters the road of ascent to a new height is of far greater importance than has been supposed. The third mediation, one would say, accomplishes the most toward this desirable cure of empty conceit, and in filling the mind with genuine self-respect. For persons from the age of eighteen to twenty-two, a college course answers this desired end of emancipating them from the sway of sophistry. This effect is powerfully aided by the character of the course of study pursued. In the elementary course completed in the grammar school the pupil has acquired the conventional branches of common English. Reading, writing, arithmetic, — the so-called

“three R’s”—grammar, geography, and United States history, furnish him the necessary disciplines that enable him to take up the rudiments of human experience, and give him a mastery over the technical elements of the practical theories of human life.

There are five windows in the soul, which open out upon five great divisions of the life of man. Two of these relate to man’s comprehension and conquest over nature, the realm of Time and Space. Arithmetic furnishes the survey of whatever has the form of time; all series and successions of individuals, all quantitative multiplicity being mastered by the aid of the art of reckoning. Through the geographical window of the soul, the survey extends to organic and inorganic nature. The surface of the earth, its concrete relations to man as his habitat and as the producer of his food, clothing, and shelter, and the means of inter-communication which unite the detached fragments of humanity into one grand man; all these important matters are introduced to the pupil through the study of geography, and spread out as a panorama before the second window of the soul.

Three other departments or divisions of human life lie before the view. Human life is revealed in the history, civil, social, and religious, of peoples. The study of the history of one’s own nation in the elementary school opens the window of the soul which looks out upon the spectacle of the will-power of his nation.

In the language of a people are revealed the internal logical laws or structural frame-work of its reason, and the conscious realization of the mind of the race, as they appear in the vocabulary, grammatical laws, or syntax. Grammar opens to the child this view of the inner

workings of the mind of the race, and helps him in so far to a comprehension of his own spiritual self.

Literature, finally, is the most accessible, as well as the fullest and completest expression of the sentiments, opinions, and convictions of a people; of their ideals, longings, and aspirations. The fifth window of the soul looks out upon this revelation of human nature through literature.

The study of literature commences with the child's first reader, and continues through his school course, until he learns by means of the selections from the poets and prose writers in the higher readers, the best and happiest expression for those supreme moments of life, felt and described first by men of genius, and left as a rich heritage to all their fellows. Their less gifted brethren may, by the aid of their common mother tongue, participate with them in the enjoyment of those high moments of inspiration that descend upon them through the favor of their genius.

In the high school the traditional course of study continues the lines marked out already in the elementary schools. This may appear strange to us. That a course of study should have been marked out unconsciously, not by the concerted endeavor of the directors of elementary education acting in council, but rather as a fortuitous result of unsystematic experiments conducted for the most part by persons inspired by narrow and partial views, may seem to us a sufficient ground to condemn the result. But we are familiar with the doctrines of natural selection, and the survival of the fittest. We can at any rate understand that the totality of experiment would reach the best practical method. The outcome of the entire activity of the educational intelli-

gence of the people takes on something of the character of an exhaustive experiment. Reflection upon the results achieved by any large body of humanity will discover to us the fact that an exhaustive survey of the possibilities of the situation has been taken by the directive intelligence, even though this so-called directive intelligence has not been consciously present in any one individual. Mysterious as it appears to the mind unacquainted with social science, and unaware of the solidarity of the associate endeavors of men, it is nevertheless true that the net result of any complex of labors, bears a more rational character than can be discovered in the individual labors composing it.

The five provinces which a rational insight into the world of nature and the world of man discovers, are represented, as we have seen, in the course of study in the elementary school. They are also carefully provided for in the high school.

Arithmetic and geography, sciences that relate to nature (organic and inorganic) are found in the common school. The high school continues these by more advanced studies following in the same line; algebra and geometry, physical geography, and natural philosophy (or physics). The mathematical studies treat of time and space, the abstract possibility of existences in nature.

Arithmetic and algebra concern the form of time; geometry, space in general; trigonometry, the measurement of space, by means of the triangle. Physical geography surveys organic nature in general; being a compend of ethnology, zöology, botany, geology, meteorology, and astronomy; the total complex of nature viewed as organism or systematic process. Natural philosophy and chemistry (physics, molar and mole-

cular), takes a survey of the elements and forces and their quantitative manifestation.

Besides the two divisions of the world of nature into organic and inorganic, there are three divisions of the world of man or human life as we have already seen. These three divisions include three revelations of human nature ; first, the revelation of man's freedom or self-directive will-power, as we find the same in the history of peoples. The second division includes a like revelation of the internal processes of the mind in the vocabulary and grammatical structure of the language. The third revelation contained in the literature of the people brings to consciousness the results of the life of the people, portraying their struggles and sufferings, their triumph and achievements. There is no department in this theoretical survey of the world more essential to the welfare of a people than this last ; the survey of the deeds of the race and their consequences, in the great historical paintings contained in the national epic and dramatic poetry.

These three divisions of the world of man are represented in the high school course by universal history, and some study of the frame-work of constitutional government, for the will side of man ; the study of Latin, perhaps also Greek, some modern language, rhetoric, mental or moral philosophy for the theoretical side of man ; the study of the history of English literature, of Shakespeare, and perhaps some other standard writers, and the literary contents of the Latin, Greek, or modern studies already mentioned, and perhaps some general or special study of the history of the fine arts, architecture, sculpture, painting, and music for the æsthetic side of man.

In this survey of the course of study in the high school, I have not drawn upon the imagination, but have mentioned not only what is the complete typical course of the high school, but at the same time what is substantially realized in the course of the public high school everywhere in this country. In the discussion of such a course of study it becomes readily manifest why such a curriculum gives theoretical insight to the pupil, and also practical directive power in the community. It is useless to expect to find directive power in an individual who lacks theoretic insight into the nature of these great departments embraced in the two worlds, nature and man. Directive intelligence precedes practical directive power, as its necessary condition. Whenever it happens that great world-historical characters appear, rising from obscurity like Cromwell or Napoleon — apparently prodigies of nature, without special education in the schools — shallow students of history are ready to draw out as the lesson the lame and impotent conclusion of the futility of school education. Students like Carlyle, however, penetrating to the essence of human character, find directive intelligence the chief condition of greatness, and most manifestly so in these instances of world-historical men. Like other educated men of the time these noble spirits see the details of life in which they live and move. But not like the educated men who are still left in the acolyte stage — the stage of mere prescription, of mere pupilage, the stage of apprenticeship and not of mastership — these men grasping the details in their entire compass, seeing the circumstances of their time as a totality, have been able to act as great directive leaders. In many cases the complex of details — their special peculiarities, adapta-

tions and relations—have not been so thoroughly known by these heroes as by their subordinates in the acolyte or pupil stage of education. Directive intelligence has in this case acted through subordinate directive intelligence. It is evidently a fatal mistake for the hero if he neglects to supplement his knowledge of subordinate details by such knowledge through the aid of specialists.

Such a great leader could not exist, therefore, without the aid of the specially educated class.

So in our own time the great commercial combinations which achieve the wonderful victories in productive industry, transportation and inter-communication, rest on educated directive intelligence. The railway kings, the great capitalists, the inventors of great combinations are most frequently men of inconsiderable school education. Their insight is special, however, relating to their departments only in the phase of totality. All the more necessary it is that they should supplement their knowledge of details obtained through learned specialists. Directive intelligence they possess through insight into the relation of the whole department to other departments. This directive intelligence they use practically, through the aid of the directive intelligence of their subordinates who manage the details.

In the discussion of the question of directive intelligence and its nature, we are met at once by the distinction between information studies and disciplinary studies. We may describe information studies loosely as those which deal with details, results, rules of experience—in whatsoever department. Disciplinary studies, on the other hand, should be characterized as dealing with the genesis and productions of results, rules, and usages. Again, information studies should relate rather

to incidental subjects than to principles, although principles themselves when considered apart from their genesis, belong comparatively to the department of information rather than discipline.

Among the scattered facts of experience and study — among the bits of information that make up the theoretical view of the world possessed even by the humblest individual — a principle enters as a nucleating centre reducing the chaos of isolated bits of information to an orderly system so far forth as the generality of the principle permits. A system grasps details in unity, and emancipates the individual from their dead mechanical influence. The study of principles in their genesis or development gives one further directive power over details, through insight into the laws of their production and change.

Disciplinary studies, therefore, as herein defined, are the studies that chiefly give directive intelligence, and are therefore the most practical of all studies.

This distinction between disciplinary and information studies gives us a clue to the proper estimate to be placed upon facts which concern the history of development. No matter how complete the insight into facts as they are, there is no directive power unless to this is joined a knowledge of other states, conditions and combinations which are possible. Directive power deals with actual states and conditions, and their transmutations into states, conditions, and combinations, which are at present mere possibilities in the mind. It is clear that one learns possible states and combinations by studying processes of transmutation in the world. We gain directive knowledge of things through a knowledge of their history and development. The first step to-

wards this knowledge is therefore a knowledge of past facts, or of present facts that are related to other facts as the embryonic stages of their growth.

Here we come to the principle which throws light on the much vexed question of the so-called "fetich;" the study of the classical languages, Latin and Greek. It will be acknowledged without dispute that modern civilization is derivative; resting upon the ancient Roman civilization on the one hand, and upon the Greek civilization on the other. All European civilization borrows from these two sources. To the Greek we owe the elementary standards of æsthetic art and literature.

They have transmitted to us the so-called perfect forms. All culture, all taste bases itself upon familiarity with Greek models. More than this, the flesh and blood of literature, the means of its expression, the vehicles in which elevated sentiment and ideal convictions are conveyed, largely consist of trope and metaphor derived from Greek mythology. Before science and the forms of reflection existed, the first method of seizing and expressing spiritual facts consisted of poetic metaphor and personification.

Images of sense were taken in a double meaning; a material and a spiritual meaning in inseparable union. We and all European nations, even the ancient Romans are indebted to Greek genius for this elementary form of seizing and expressing the subtle, invisible forms of our common spiritual self-hood. One can never be at home in the realm of literature, without an acquaintance with this original production of the Greek people.

More than this the Greek people, essentially a theoretically inclined race, advanced themselves historically

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from this poetic personification of nature towards a more definite abstract seizing of the same in scientific forms. With the Greek race theoretical reflection is also indigenous. The Greek language is specially adapted to this function, and in the time of the historical culmination of the Greek race, appeared the philosophical thinkers, who classified and formulated the great fundamental divisions of the two worlds, man and nature. All subsequent science among European peoples has followed in the wake of Greek science ; availing itself of Greek insights, and piously using the very technical designations invented by the Greek mind for the expression of those insights.

The theoretical survey of the world in its two phases of development, æsthetical or literary, and reflective or scientific, is therefore Greek in its genesis ; and a clear consciousness of the details and of the entire scope of that side of our activity, requires the use of the elementary facts that belong to the genesis or history of the development of this theoretical survey. A knowledge of Greek life and literature is a knowledge of the embryonic forms of this great and important factor in modern and all future civilizations.

The Roman contribution to modern civilization is widely different from that of the Greeks. Instead of æsthetic or theoretic contemplation the Roman chooses the forms of the activity of the will for his field of view. He has formulated the rules of civil activity in his code of laws. He has seen the mode and manner in which man must limit his practical activity in order to be free. He must act in such a manner as not to lame and paralyze the products of his own activity, and the products of the activity of his neighbors.

Let each one act so that his deed will not be self-destructive, if adopted by all men. This is the Kantian formula for free moral activity. Man is placed in this world as a race, and is not complete as a single individual. Each individual is a fragment of the race, and his solution of the problem of life is to be found in the proper combination with his fellow-men, so as to avail himself of their help, theoretical and practical. Theoretically they will help by giving him the results of their experience in life; their pains and pleasures; their mistakes and successes; the theoretical inventory which they have taken of the world in its infinite details; and the principles they have discovered as the units which reduce those details to a system. Without this combination with his fellows, he remains an outcast, a mere embryonic possibility of man.

How important, then, it seems to us, is this invention of the civil forms which make possible this combination and co-operation. Other people before the Romans and contemporary with them, may lay claim to this invention of the civil code. But their claims cannot be sustained. Moral and ethical forms, in sufficiency, they have; but the civil form which gives and secures to the individual the circle wherein he shall exercise supremely his free will, and beyond the limits of which he shall submerge his individuality utterly in that of the state — the supreme civil institution — such a civil form elaborated into a complete code of written laws we do not find elsewhere. It is, moreover, a settled fact in history that modern nations have received their jurisprudence from the Roman peoples, modifying the same, more or less, to accommodate it to the developed spirit of the Christian religion. It is essential for a correct view of this

subject to consider carefully the nature of the forms of expression which must be used in order to define the limits of the free-will. The code which expresses such limits must deal with prohibitions only, in so far as it defines crime. But it must furnish positive forms in which all agreements and contracts are to be defined. The full exercise of free-will within the sphere allotted to the individual, is accomplished only by means of the institution of property. The complete idea of property renders necessary the possibility of its alienation, or transference to others. Contract is the form in which two or more wills combine, constituting a higher will. The Roman law furnishes the varied forms in which this higher will, essentially an incorporate will, is realized. This is the most important contribution of Rome to the civilization of the world. So important is contract to the Roman mind that it deifies soulless abstractions in which it sees incorporate powers. The State is its Jupiter, its Mars, its Juno, its Venus. The word *religio* etymologically expresses the highest spiritual relation as conceived by the Roman. He makes a vow, proposes a contract to his gods, and the gift of the god being obtained he will faithfully fulfill his vows. The Roman people possess, as individuals, a double consciousness, a limitation within the self: the self as supremely free within the circle of its property; the self as utterly submerged in a higher will, that of the state beyond its personal limit. All modern civilization, rooting as it does in Rome which had conquered the whole world, receives as its heritage this double consciousness, and can never lapse back into the naïve, childish consciousness of pre-Roman civilization. Just as the technical terms and expressions, the very categories in which literary and art

forms or philosophical and scientific forms are possible, are derived from a Greek source, so too, on the other hand, these most important civil forms of contract, incorporation, and criminal definition, are borrowed from Rome, and were originally expressed in Latin, and Latin derivatives in most of the European languages still express and define these distinctions.

To study Latin, just the mere language and its Grammar is to study the revelation of this Roman spirit in its most intimate and characteristic form. Language is the clothing of the invisible spiritual self of the people, a revelation of its primary attitude towards the universe. A study of the literature, politics, history, religion and law-making of the Roman people is a still further initiation into the mysteries of this phase of modern civilization.

Comparative philology and sociology owe to us the duty of investigating the Greek and Latin languages with a view to discover what must certainly exist, a grammatical and logical adaptation of those languages not only to express the fundamental point of view of those peoples, the one theoretical and the other practical, but also to stimulate by the reaction upon the minds of those using those languages, the original theoretical or practical tendency. The modern youth, by common consent in all civilized countries, is trained upon Latin and Greek as special discipline studies. Little or no mention is made of the rationale of this process to the pupil. Very little is done to point out the relation between facts and information obtained within the sphere of classic literature and the modern facts, which surround him. Nevertheless these facts concern in one way or another the genesis of the modern facts, and all

activity of the mind goes to the constructing of bridges of relation from the one to the other. Merely by thinking the modern facts through the colored spectra of the ancient facts the classically educated man is able to decompose the compound rays united in the modern. All unconscious that the classical material of his education performs the function of a decomposing prism, or that the ancient facts are embryonic stages of the modern facts, the student finds that he has a superior power of analysis and generalization, that he is able to fix his attention upon a single strand of modern civilization, its political and legal forms, or its theoretical, or its æsthetical, and use the same practically. His facility is a real possession of the highest practical value, but he may not have any true theory of its existence or of its origin. He may call it "a college fetich."

It is the subtlest and least observed or most rarely formulated expression of the spirit of the Greek and Roman peoples, namely, their impression upon the grammatical forms and categorical terms of their languages, that exercises the surest and most powerful effect on the classical student.

One may say that of a hundred boys, fifty of whom had studied Latin for a period of six months, while the other fifty had never studied Latin at all, the fifty with the smattering of Latin would possess some slight impulse towards analyzing the legal and political view of human life, and surpass the other fifty in this direction. Placed on a distant frontier, with the task of building a new civilization, the fifty with the smattering of Latin would furnish the law-makers and political rulers, legislators, and builders of the State. In the same way a slight smattering of Greek through the subtle

effect of the vocabulary and forms of Grammar would give some slight impulse not otherwise obtained towards theoretical or æsthetical contemplation of the world. On the highest mountain ridge a pebble thrown into a rill may divide the tiny stream so that one portion of it shall descend a water-shed and finally reach the Pacific ocean, while the other portion following its course shall reach the Atlantic ocean. It requires only a small impulse to direct the attention of the immature mind of youth in any given direction. A direction once given, the subsequent activity of the mind follows it as the line of least resistance, and it soon becomes a great power, or even what we may call a faculty. Certainly it will follow that the busying of the mind of youth with one form or phase of Roman life will give it some impulse towards directing its view to the forms of the law. Or, the occupation with the Greek language and life will communicate an impulse towards literary and philosophical views of the world.

If some one now asks, how is it, then, that our ablest Latin scholars do not attain the profoundest insight into jurisprudence and constitutional law? Why are they not the profoundest politicians and statesmen? Why are not those who have studied the Greek language and literature most deeply, the men most distinguished for literary production and criticism, for philosophical insight and for science? I reply by calling attention to the difference between information studies and discipline studies, and would suggest that those who have penetrated most profoundly into the genesis and development of the Roman spirit and its transmission to modern peoples, are the men and the only men who can be called profound students of politics and jurisprudence.

Those whose eyes are trained in another direction cannot and will not see the actual historical development of this phase of our civilization, and it is quite useless to call such persons profound students of politics or jurisprudence. No more would the specialist in snakes or turtles deserve the title of profound naturalist, if he had happened to neglect entirely the study of the embryology of those reptiles. A knowledge that takes in a vast treasury of facts, but knows not the relation of those facts so as to bring them into systems of genesis and evolution does not deserve to be called profound. It is replete with information, but not with the most valuable part, even, of information. So the students of Latin and Greek whose memories contain all the rules and all the exceptions of the paradigms and of irregular forms, but lack a knowledge of the genesis or evolution of those forms, have yet to study those languages as truly disciplinary studies. Facts relating to the Latin language, relating as they do to the genesis of an important element in all modern facts, have, as we have shown, a potential disciplinary value. This disciplinary value does not become real, however, until the relation of those facts to the derivative modern facts is in some way seen, felt, or acted upon. It cannot be too carefully noticed that one fact differs from another in this potential disciplinary value, and that a knowledge of the German language or the French language is not a knowledge of a language which belongs to the embryology of English-speaking peoples, and hence is not disciplinary in that particular respect; although it may be disciplinary in many general ways. The revelation of man to himself is certain to be found in the history of the race. He who will comprehend profound literature

and art and philosophy must study their evolution by peoples with whom they are or were indigenous.

Besides primary knowledge obtained by an investigation of essential facts (called *Urphänomen* by Goethe), and the history of their development into the present facts, there is a secondary knowledge which deals altogether with immediate facts without their relations; or, if it concerns itself with relations, takes them by hearsay and deals with them as dead results. It is obvious that a very little primary knowledge is worth more than a cargo of secondary knowledge. It is clear, too, that a very scant knowledge of the classic languages may prove more fruitful in an energetic mind disposed to draw inferences and see relations, than a vast store of erudition in those languages when piled up as so much lumber.

From this glance at the disciplinary or potential disciplinary value of classical study as a study of evolution, let us turn for one moment to the significance of mathematics as the general discipline for the whole field of the science of nature. All human experience, every sense-perception of man, every observation, every anticipation of perception by means of imagination, every image of fancy, are possible only through the forms of space and time, and therefore are quantitative. Arithmetic, algebra, geometry, and the higher analysis, apply to any and all phases of nature. Mathematics gives us not the results of experience, but a far more potent knowledge: the knowledge of its necessary logical conditions—the conditions which it must assume in all phenomena. Physics and chemistry, most general sciences of nature next after mathematics, are derivative or secondary, and apply mathematics to physical ele-

ments. Latin, Greek, and mathematics from the point of view here presented must be regarded as disciplinary studies in a more important sense than the other studies of the school. They furnish the insight into the genesis of modern civilization, and into the constitution of nature. But it does not follow from this that Latin, Greek, and mathematics should be the sole studies pursued during the period of preparation for college, or for years within the college itself.

I believe that the best course of study for any one pupil is the best of all others, so far as fundamental disciplines are concerned. The course of study for a pupil who is to attend school for one, two or three years should be a section of the course for the pupil who is to take a complete course of higher education. In all cases the studies for the first three years of the pupil in school (if he enters school at the age of six or seven years) should include reading, writing, arithmetic, pursued with text-books, and oral instruction in the elements of geography and natural history. For the next four or five years of the pupil's course, reading should be continued into the study of the various selections from the best English literature (found in the higher numbers of all series of school-readers); penmanship; composition-writing; the elements of industrial drawing to cultivate the hand and eye; the completion of arithmetic; the history of the United States and a study of the essential features of the national constitution; English grammar, mathematical and political geography—studied with special reference to physical geography; several courses of oral lessons in natural science, covering its essential departments, (astronomy, geology, plant life, animal life, races of men, meteorology, physics, so

far as to explain the principles involved in the child's play-things and in the use of machines, together with the chemistry of common things).

After these things and beginning with the eighth or ninth year of the pupil's study, Latin and algebra should be commenced and natural science should be pursued with a text-book (the text-book on physical geography, to be followed by the text-book on natural philosophy). General history should be commenced and the study of literature continued by the aid of a higher reader containing selections of more elevated thought and ornate style.

The course of study preparatory for college omits for the most part those branches of study which bear the name of "moderns." Modern civilization has developed three great increments and added them to the inherited wisdom of the race. These increments are: modern natural science, modern literature, modern history-writing. These three moderns had no well recognized existence in schools of higher education a century ago. A knowledge of them was not demanded or expected from the educated man, unless he was a specialist. The condition of things has changed so materially through the influence of the newspaper and periodical within the past fifty years that no man can pass for educated without more or less minute acquaintance with these three phases of modern activity. They have become recognized as conventionalities of intelligence. This is the all sufficient reason for introducing the rudiments of these things into the most elementary schools and for continuing their study in all grades of higher schools. Nothing can make up for the student who shall receive a higher education the deficit in his

culture caused by a neglect of the mastery of the elements of the three "moderns" in early life. They ought to exist in his mind through the period of his primary education as well as in his secondary and higher education. Without these the disciplinary effect of classical study must necessarily be weakened, through the want of the modern facts to which the classic lore is related as embryonic presupposition.

If this be true the modifications that have been made in the course of study pursued in college, in recent times (in the last twenty years) are not based on a correct insight into the difficulty to be met. The management of college education in this country has answered the objection which charges it with neglect of the three "modern" branches until the last two years of the college course, by raising the standard of admission sufficiently to cover the work of the first two years of the former college course and thereupon it exhibits a programme in which the three moderns are represented throughout the course either as "required" or "elective" studies.

The question in dispute did not concern the length of time to be devoted to higher education but the early introduction of the moderns into the course of study. If four years of preparation and two years of college work, or six years in all were devoted to the exclusive study of the classics and mathematics, with an almost entire neglect of moderns, the case would not be altered if these six years should be relegated entirely to the preparatory school. In order to meet the difficulty discussed here, the college should have changed the conditions required for admission, and thus have compelled the preparatory school to introduce the moderns in a

proper manner side by side with the classical studies. Of course the elevation of the standard of the college can be justified on its own grounds. It obliterates the mischievous distinction that existed between the standards of American and English colleges. But this is not so important as the readjustment demanded of the college in order to bring it into harmony with primary education founded on a true appreciation of the demand of modern studies in education. As is usual in the discussion of political and social reforms the parties of the dispute are busied, each, with bringing forward his own partisan view of the case. There is little that is judicial and impartial, going to the root of the question and confirming and establishing what is of permanent worth on either side. The advocates of the "moderns" wish to dispense entirely with classical study, while the defenders of the college system refuse to yield place for the "moderns."

In the colleges of the North-western States, led by the State universities, there has been some substantial progress made towards a modification that will recognize the received high school course of study as a preparation. But such modification only makes these colleges a separate phase of education, differing more and more widely from the standard college of the Atlantic States. To reach the high standard of admission, required by the Eastern colleges, the public high school ought to add two years to its course. This would make the course of study in the common school systems fourteen years instead of twelve as at present, and is impracticable. The average age of the high school graduate at present being eighteen and a half years, it would manifestly be unwise to demand six years instead

of four years to complete his college course. The colleges that have raised their standards of admission, therefore, have done much to widen the breach between high school and college education.

In the signs of the times I do not discover any promise of the reform of this state of things on the part of the management of colleges. Even the cloud "no bigger than a man's hand," in the north-west, does not indicate so much a true appreciation of the necessity of moderns in primary and secondary education as it indicates a wise insight into the desirability of connecting the college with the public school as it is. It surrenders its convictions in behalf of the old regime, and lowers its standard in order to adapt itself to unpropitious circumstances. In better times it hopes a reform in the public school that will devote more attention to the classics and mathematics at the expense of the "moderns." Meanwhile, the influence of the college is felt in the building up of preparatory courses within the high school, fastening upon the public school system a recognition of the necessity of private, separate, and distinct secondary education in order to fit for a college education.

One must turn to the teachers of public high schools and to superintendents of public instruction for the adoption of the only means of relief. Unusual efforts must be made on the part of public high schools to induce their pupils to complete their education in colleges. The personal influence of the teachers, in one year's time, will avail to double the number of high school graduates who seek a college training. The greater maturity of mind which comes from a well-balanced preparatory course will furnish a prevailing argument in favor of a more

symmetrical system. Within a few years, when the colleges have come to derive a large majority of their pupils from public high schools, this question will receive its due consideration for reasons of private interest, if for no other. The numerical strength of high-school graduates, who have subsequently received a college education will assist in the solution of this question.

But no solution will be more than a make-shift, if it does not secure the recognition of "moderns," as an essential portion of the course of study in all elementary and preparatory schools, and a like recognition of the necessity of classic study in all secondary and higher education.

In the "moderns" one finds the expression of his present civilization; in the classics, it sembryonic forms and evolution.

DISCUSSION.

BY DR. E. E. WHITE, OF INDIANA.

There is one point which ought not to be unexpressed in connection with this paper so full of wisdom and interest, to which we have just listened. It is this: by our inheritance, as has been unfolded in the essay, we have been seeking DEXTERITY of intellect. We have been establishing schools of all grades to educate the intellect. Great results have been attained, and in seeking other results for the future, they should not be disparaged. But if we look down the past, do we not find all along the line of history an enormous waste? Nobody can tell, — because the records have not been preserved, — the average age of mankind a thousand years ago; and nobody can give us the percentage of imperfect, pauper, or criminal humanity, a thousand years ago. But within the region that we can see, of which we have some knowledge, we see a gain, an enormous gain, in the percentage of life that is saved, in the increased average length of human life, and in the

increased higher conditions of that life. We as educators believe that the primary uplifting force in this work has been education. Now the point to which I wish to call attention is this: that the more we prosecute this great work of the culture of the intellect, the more we find it necessary to take cognizance of the early period of human life, and to know more about human life in all its phases, not merely as teachers, but as social scientists, as educators, as sanitarians, in order that we may comprehend better the principles under which child-life begins and progresses. Even to-day, our statisticians tell us that nearly one-half of child-life is buried in the grave before it is five years old, and of the portion that survives, a very considerable percentage become paupers or criminals. The social scientists also tell us that only about half of the people whom we have enumerated in our decennial census are self-supporting. What does it mean? Education has undoubtedly done much for the uplifting of the masses; but should we not now begin to look more carefully to earlier child-life, study it, take care of it better, let less of it become waste; let less of it become criminal, and less pauper; must we not prepare it to become more self-supporting? I don't mean by self-supporting merely bread-winning, but self-thinking, self-moving as well.

We must also take cognizance of another dexterity than that of the intellect. We must not overlook the physical conditions of early childhood; but if we regard them closely, we shall find connected with them, unconsciously unfolding themselves at the same time, the great moral capacities, and with them a certain activity of the child, that is to be led, and guided, and restrained, and sometimes, of course, made obedient. The moral result is not secured without it. By guiding this activity, there will proceed from it a dexterity, which is well nigh as important as intellectual dexterity, and that is dexterity *of the hand*.

I once made an investigation among the criminals in the jails and prisons of New England, the result of which tended to show that the knowledge of a handicraft, or of any vocation that would yield a living, was a safeguard against crime about equal to education furnished in the way of letters. This surely may be put down as a part of the moral result of acquiring this dexterity of hand. And if this is its effect in relation to crime, what will be its effect in unfolding character, in developing possibilities, in preparing us for the tremendous contingencies of a vast increase of population?

without it, is there not danger of being brought to the state of those cities of Europe in other ages that were depopulated by such enormous incoming of disease, and pestilence, and calamity, against which they had no safeguards ?

The next speaker was Prof. Soldan, of St. Louis. He said : —

One of Spinoza's apothegms, describing all kinds of knowledge, says "that only is the highest knowledge which looks at all things under the form of necessity." I was reminded of those words while listening to Dr. Harris, because his argument seemed to rise above the narrow limits of the special school, and the specialist's view, and presented the subject from a standpoint, which looked at the whole question of education in all its bearings ; recognizing the interest of common school education, as well as that of the high school and college. I agree with Dr. Harris heartily when he says that one of the evils found in some high schools (I hope in but very few) is that they give to the boy or girl that has passed through them, together with a good deal of knowledge, that presumptuous belief that such education finishes him or her with a complete training. This notion looks at high school education, which is *a part* of education only, as if it were the whole. A high school education is important, so far as it is considered a part of a grand educational work. But a high school that takes away from boys and girls the aspiration for still higher intellectual work, has missed its vocation.

The last speaker was Dr. Wm. A. Mowry, of Providence, R. I. He said : —

As practical educators in America, a part of our business is to inquire what is the best method of preparing students for colleges. I take it that it is impossible that the public school system can do all the work. The American system, or the American idea is that Government should not do that which the people can and will do equally well or better. Hence, to-day, we have three or four systems and methods. First may be mentioned the old-fashioned academies, endowed institutions like the Phillips Academy. These schools are doing excellent work. We cannot and ought not to

dispense with them ; there is a field for that class of institutions. But the former endowed academies of many of our New England towns have passed away. Why? Because in the impulse which has been given to public school education, a system of high schools has been organized and pushed forward, until in many of our States every town of a fair number of inhabitants has its high school that will fit boys for college. Often, indeed, the high school is held in the old academy building, but the academy itself has gone out of sight.

Then there are preparatory schools connected with the college. In some sections of the country, the college faculties find such schools very useful, in order to prepare their students in the best manner. Preparatory schools will not find foothold where they are not needed. If you have high schools that will do all the work, and sufficient for the work, there will be no preparatory school. If there is one needed, then let it be, and bid it "God speed." In this country, broad and free as it is, with the degree of intelligence to which its people have arrived, no one system of fitting boys and girls for college will answer, or will do all the work. But we require the public school wherever it can be, the old academies wherever they are doing good work, and the preparatory schools wherever they are needed.

VIII.

THE RELATION OF COLLEGES TO COMMON SCHOOLS.

[CONTINUED.]

BY PRESIDENT M. H. BUCKHAM, UNIVERSITY OF-VT.

[AN ABSTRACT.]

I shall base what I have to say on this theme upon this general proposition: that all social and moral improvements come, and must come, from above and not from below, from the superior few and not from the average many, from those who have rational convictions and intelligent plans, and not from those who have merely wants and necessities. As regards the education of the people, we must look for correct principles and wise methods, not to the people themselves, to the average intelligence and to current judgments on the questions that arise, but to the more advanced minds, to the men of large study and of profound convictions.

I am aware that this statement is likely, at first, to shock the republican sentiment of an American audience. I have not to learn at this late day that he who wants applause must assert that all wisdom and all virtue reside with the mass of the people. Are we not told by our superior men themselves, especially on the eve of an election, that the people at large are the prolific and never-failing source of all kinds of merit? But, as we are not now on the eve of an election, perhaps we can bear to hear a truth which we need to hear — and to heed — as much as any that can be brought before us, both for itself and as opposed to an error

which is a prolific source of evil in our educational system. That truth is, that the wisdom and virtue which are undeniably resident in the body of the people are inert and unavailing until they are roused by the superior minds in which they are active. The error is the prevalent notion that this great interest of education, inferior only to those of piety and virtue, can be safely left to the estimate, the interest, the decision of the popular mind unaided by the convictions of the more thoughtful and by the profound earnestness of the life-long specialists in this department. There are certain accepted notions of popular merit, born of enthusiastic republicanism, and nourished to extravagance by demagogues, which it is high time to revise. The common belief is that popular liberty is the achievement of the people ; that the down-trodden and oppressed masses arose in their own might, and threw off the yoke of their oppressors, and made good their own right to freedom ; whereas, history makes it plain on every page that in every case the people have had to be roused, organized, led, rallied after defeat, heartened when dispirited, checked in their insolent triumph, and carried through the long and arduous campaign, by the faith, the zeal, the prudence, the heroism of their superiors in enlightenment and virtue. In the matter of public education as in other great human interests, the highly trained minds must assume the responsibility of leadership. If they are recreant to this trust and leave these great interests to the undisturbed control of incompetent mediocrity, public education will degenerate, and the general intelligence will not be adequate to the tasks imposed on it in a republic.

Having thus, as I trust, prepared and cleared the

way for its reception, I make this confident statement: the common-school system was framed and put in operation by men of liberal attainments; it depends for its maintenance and success, every day, every hour, upon the same class of men.

I. In the first place, the common school depends on the higher school for the subject matter of its teaching. It is a mistake to regard elementary knowledge as the most obvious. It is, in fact, usually the most far-fetched. Could the lore of the common schools ever have produced of itself that first statement of the elementary geography, "the earth is round like a ball?" It required ages of science to work out that simple little sentence. Look into the spelling-book. The child's first lesson, the little things respecting the alphabet, writing, spelling, which he learns in a few hours, involve the labor of the sages of all time. Take up the elementary arithmetic. The zero which the child handles so easily that he is always glad to see it in a problem, was one of the greatest triumphs of mathematical science. Compare the text-books of to-day with those of fifty years ago; the difference marks not so much increased skill in book-making and improved methods of teaching, as it marks progress in the profound and recondite studies. The Herculean labors of explorers in Arctic seas and in the heart of Africa; the delicate observations and intricate calculations of astronomers in the remotest islands of the Pacific; the patient researches of the laboratory; the last and highest attainments of all the sciences, find their way into the child's text-book. More than once, after searching through a whole library of encyclopædias, and monographs, and transactions of learned societies, for the latest fact on

some question of research, I have stumbled upon it in an elementary text-book, where some one more learned than I had put it for the use of my child. It was old Bishop Beveridge who said, "it takes all our learning to make things plain." When we get some things cleared up in the college lecture-room, it will be easier to teach them in the common schools. When, for example, the clumsy and lumbering terminology of some of the sciences is replaced by a more lucid and easy one, it may be possible to teach more of the science of common things in the school-room.

II. Secondly, it belongs to the college to cherish the spirit of learning in the community, and thus to uphold the dignity and importance of the work done by the common schools. The respect in which any work or occupation is held depends on the respect imposed by its highest representatives. If the college should succumb to the tendency of the age to subordinate all studies to the demands of a low material practicality, the common schools would cry out against us that we had betrayed and ruined them. A few years ago when a certain college was in a bad condition, its officers at feud, its students disorderly, its scholarship and discipline low, the teachers of neighboring schools became dispirited, parents took their children from school and put them into business, and the whole educational spirit of the region became demoralized. It is said that the parish schools of Scotland are kept up to a high grade by causing every pupil to understand that the University is in plain sight from the school window. I remember, when a boy at school in my own State, the teacher told us something about the University of which he was a member, about the studies there carried on, the men

who occupied the chairs of instruction, about the library, and the apparatus for study, and I distinctly remember the impression left upon my mind — how it made all study seem different — how the little school-house seemed to get light from the dome of the University — how we all seemed to be somehow connected with the far-away college, by being engaged in a common pursuit, and to be dignified by the connection. The window of every common school should look toward the university, and the path from the door of the school to the door of the university should be made plain to see. Not that every child should be encouraged to aspire to a place in the university, but that when he passes out of the other door, which opens upon a life of trade or hand-work, he may have had a better training for that life, and for the life of a citizen, and of a man, because he received while at school some wholesome and elevating, though indirect influence from the university.

III. Again, the common schools are dependent upon, and have a right to look to, the colleges for guidance in the philosophy of teaching. Teaching is a form of practical psychology. Whatever the profoundest students, with subtlest introspective research, and broadest induction, can discover of the laws and operations of the human mind, the primary teacher needs to apply in her every-day work. These studies, so often opposed as unpractical, are to those whose field of work is mind, wholly or in part, to lawyers, for example, clergymen, physicians, and above all, to teachers, — the most practical of all studies. In fact, the teacher is necessarily a student of mind ; often, without knowing it, the teacher becomes a discoverer in the science of mind. It is not

too much to say that the new teaching philanthropies of our times, the work among news-boys and street Arabs, the Sunday-school work among the degraded and vicious, have at once illustrated the value of the studies in question, and made important contributions thereto. It was a happy thought of one who is at once a student of mind, and of the principles of teaching, to seek for light on points in psychology by propounding a series of questions to primary teachers. But, while every enterprising teacher is an investigator in this department, only the minds of broadest range and most discriminating judgment are competent to deduce general principles from observed facts, and to lay down laws which shall be wise and safe for daily practical use. For here, more than anywhere else, imperfect knowledge is fatal ignorance, sciolism is mischievous error.

Hence we may see the wisdom of a measure which is comparatively new to us in this country, but which is receiving much thought in educational circles, the establishment of chairs of pedagogy in universities. It might be thought that such chairs would be more appropriate in normal schools ; but those who advocate the endowment of university chairs of teaching, while they would take away nothing from the range of normal school work, would have the subject of teaching carried one grade higher than the normal school, would have its principles and methods subjected to a profounder and more patient investigation, and take on a more thoroughly scientific form than would be attainable in the normal school. For these schools, supported as they are by public taxation, and subject to the jealous criticism of other schools, do not afford to their teachers the opportunity for research, for studies whose benefits, though

sure, will come to-morrow and not to-day, which professors in universities have or ought to have. Here are questions of the deepest moment, and of every-day occurrence, on which we need the wisdom of our profoundest men, devoting to their investigation the studies of a lifetime. How to develop mind, how to form character, to aid and accelerate the developing and formative processes of nature, and thus to accomplish the work most economically and effectively ; here is a large, complicated and delicate problem. When we consider what mind is, how divinely capacious, how easily led on to noble attainments if rightly led ; how easily perverted, bewildered and stupefied if misled ; it is appalling to think how rudely and recklessly we deal with it. The young girl in her teens, the boy half through his preparatory studies, are set to the most difficult and most important task entrusted to man. Might it not be that the mere existence of pedagogic chairs in universities would give a new idea of teaching to every young teacher ; would suggest to him or her, "this is an occupation which has a deep reasonableness in it, that taxes the most profound and comprehensive minds. It is no work for children or novices. It demands high qualifications, careful and conscientious preparation." But it might be hoped that from the establishment of such chairs, much direct benefit would come. In Germany, pedagogics has attained a recognized place among the sciences, and is the parent of most recent improvements in teaching, not only in Germany, but throughout Europe and America. If English and American good sense shall be added to German research and enthusiasm, the happiest results may be looked for.

I shall not waste any time here in replying to an ob-

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jection which we should meet elsewhere ; that abstract theories of education would be of little practical use in common school instruction. Teachers surely do not need to be told that no theory is good, unless it is good for something in practice, and that no good work can be done except upon a good theory.

The finest thought of the age expended upon such questions as the true order of development of the several faculties, the proper adjustment to each other of the spontaneous and the voluntary activity of the mind, the help to be obtained from the moral forces of our nature in intellectual development, if it reach wise and true conclusions, is none too fine for application to the training of the little immortals who will get all their education in some little red school-house.

IV. The college should sustain common schools by giving due honor to common-school branches in the curriculum of study. In the preparatory examinations for college, in estimating the merit of subsequent work, in the judgment it passes on the various kinds of scholarly accomplishments, it should strive to uphold the importance of good elementary attainments. Bad spelling, bad penmanship, bad articulation, bad syntax, should be frowned upon as unscholarly, as a far worse evidence of illiteracy than a false quantity in Latin, or a provincial French accent.

V. Finally, colleges should by their representatives take an active part in institutes, conventions, and school boards, where they have the opportunity, and thus put the college in intimate alliance with the common school. The two are mutually dependent ; they should be mutually helpful. The old economic maxim was, "take care of the pence, and the pounds will take care of

themselves." We know better now, we know that not only pence well cared for make up pounds, but pounds well taken care of breed pence ; we care for both pence and pounds. The popular cry is "take care of the common schools, and let the colleges take care of themselves." Not so ; let the colleges help the common schools, and then the common schools will help the colleges, and let the people, seeing this, help both.

A DREAM OF THE FUTURE.

ABSTRACT OF A LECTURE BY MRS. M. A. LIVERMORE, MASS.

Mrs. Livermore rapidly sketched the progress of the race from the time when man commenced his earthly career to the present hour. Beginning at a very low standpoint, intellectually, he has slowly worked his way up to his present vantage-ground. Every race and nation has lifted the world a little. Every age and generation has added a little to its wealth of knowledge, and thought, and achievement. To-day, the civilized nations of the world stand on the very tiptoe of expectation. No discovery is so amazing as to astonish them ; no prediction concerning human development so incredible that they hesitate to accept it. Steam navigation, the telegraph, and telephone bring the ends of the earth into communion, and make it impossible for one nation to be foreign to another. Electricity is abolishing the darkness of the night. The laws that underlie the weather are being searched out, and already meteorological predictions are a safeguard to commerce, the preface and prophecy of the coming time when they shall instruct agriculture what and when to plant, and ocean voyagers when they may cross the deep in safety. To the advance of civilization there can be no final stopping-place, since it is not an artificial condition, but a development in harmony with the underlying laws of man's being. The watchword of the hour is, "Go forward," correcting the mistakes of the past ; building more wisely as we have knowledge and power. If our Nation is to hold

the proud place it has won among the nations of the world; if it is to be what it ought to be—the Messiah of nations—then it must give itself to the education of the people with an enthusiasm, a wisdom, an earnestness, and a generosity, commensurate with the importance of the work. A person attains to his highest intellectual development only as his moral nature keeps pace with his mental growth. We need to have industrial education in some way ingrafted upon our school systems, so that the educated hand and eye may be carried from the school-room to the workshop with some knowledge of tools and industries. In glowing language Mrs. Livermore sketched the future; the race going ever higher and higher toward the infinite perfection, outgrowing the vices and animalisms of the present, and ascending the stairway that slopes upward toward God. She called on all to work for this, rejoicing in the future as though they saw it, and exclaiming with Whittier:

“Ring bells in unrequited steeples
The joy of unborn peoples;
Sound, trumpets, far-off blown,
Your triumph is our own.”

IX.

SCHOOL SUPERVISION.

[CONTINUED.]

ADDRESS OF EMERSON E. WHITE, LL.D., PRESIDENT OF PURDUE UNIVERSITY, LAFAYETTE, INDIANA.

Following the resolutions on School Supervision (See *Journal of Proceedings*, page 17) the Institute was addressed by Mr. White, as follows :—

It is not my purpose to discuss in this presence the necessity or the importance of school supervision. If the American Institute of Instruction has passed its fiftieth anniversary, leaving this question in doubt, there is little hope that our educational associations will ever advance beyond the *alphabet* of school organization and management.

The questions now to be considered, as it seems to me, relate (1) to the nature of the supervision needed by the schools, (2) the necessary qualifications of the supervisory officer, and (3) the plan or method of providing such needed supervision by well qualified officers. On each of these questions the experience of the country has shed so much light that it cannot now be necessary to go over the whole ground as if nothing had been settled or determined.

In considering plans of supervision for a state system of public education, it may be assumed as settled that both state and local supervisory agencies are necessary, since they are provided, in some form, in every school

system in the country. It is true that no one plan of supervision has been universally adopted, and I have little expectation that such a result will soon be reached, and for the sufficient reason, that no plan has yet been devised, which is equally well adapted to all the States and to all sections of the country. Uniformity in the details of a system of school supervision must be preceded by the adoption of a uniform system of State and local government and the elevation of the different communities to a like intellectual, social, and industrial condition. In States, for example, where the county is an important unit of local government, as in the West and the South, the county system of school supervision may be much more efficient than the town or township system; but in States where the town or township is the important civil unit, as in New England, other plans of local supervision may prove more efficient than the county system. Moreover, the low condition of the people in general intelligence and the absence of information respecting improved methods of school organization and instruction may render efficient supervision by township agents impossible, even where the township is the important civil unit.

But while universal school experience shows that there must be differences in the details of supervisory systems to adapt them to differences in educational and civil conditions, it as conclusively establishes the fact that there are general principles common to all efficient systems of supervision, and hence that there must be a degree of similarity in general plan. When the system of local supervision by town or township supervisors is adopted, there must be supervisory officers between the local supervisors and the State department, and, for the

reason, that a State Superintendent, except in the smallest States, is too far removed from the schools to learn adequately their condition and needs, or to devise and carry out effective measures for their improvement. What is needed is an intermediate agency through which the State department can effectively reach and influence the local supervisors and managers of the schools. Whether these intermediate supervisors shall be district superintendents or the deputies or agents of the State department, is a question of detail to be determined by local conditions.

We are now prepared to consider the first two of the questions stated, viz. : the nature of the supervision needed by the schools, and the necessary qualifications of school supervisors. These two questions are really *one*, for when we have determined the kind of supervision needed by the schools, the qualifications of the supervisory officers may be readily inferred. Hence, the real inquiry to be settled is :—

What kind of supervision is necessary to the highest practical efficiency of a system of schools ?

The history of school supervision, as developed in the progress of public education, throws much light on this inquiry. In the earliest period of school organization, the obvious needs were school-houses, furniture, and other appliances, and teachers, and the furnishing of these necessary things demanded immediate attention.

This material stage of school development was followed by the classification of pupils, the grading of the schools, the adoption of general courses of study, and generally by the providing of whatever was necessary to establish and carry on an efficient system of school work.

The next stage of school progress was marked by the adoption of improved and more efficient methods of instruction and training, and the direction of the schools had more special reference *to the character of the results secured*. This involved a more careful arrangement of courses of study, the adoption of measures to supply well-qualified teachers, the close inspection of the methods of instruction employed, and a systematic and thorough testing of results. In other words, at this stage of school development, supervision concerned itself, not with the mechanism of the system merely, but with the character of the instruction and other influences to which the pupils were subjected. Its chief and highest effort was to direct, improve and vitalize the *work* of the schools, securing the adoption and intelligent use of improved methods, the greatest economy in the use of time and means, and the best possible results.

This brief survey of school progress shows that supervision has passed through three stages, the first being *material*, the second *mechanical* or *formal*, and the third *professional* or *vital*. It also shows that what is clearly needed for the highest development of a school system is supervision that touches the schools in all these directions, and especially the last — the professional and vital. It is not enough that the mechanism of the schools be perfected and that they go through with the forms of instruction, with a minute record of attendance, branches of study pursued, promotion percentages, and cost. The one essential condition of a good school is right instruction and training, and all experience shows that this vital condition can only be realized by supplementing and re-enforcing all other means and agencies by intelligent, inspiring, and vitalizing supervision.

To this end, the schools must be put under the oversight and direction of supervisors who know what true teaching is, and who are competent to instruct, lead, and guide teachers ; and to this end, the supervisor must himself be an experienced and skillful educator, with a clear insight into the guiding principles of the teacher's art, and with a familiar acquaintance not only with schools and school systems, but with the most approved methods of instruction and training. . He must, in other words, be an educational expert, in close connection with the actual work of the schools, and with time and opportunity to secure the best possible results.

The necessity of such supervision is shown by the well-known tendency of all graded systems of schools to mechanism — a tendency most marked where the system as such has attained the highest perfection. This tendency is seen, for example, in the narrowing and grooving influence of the test examinations, almost universally employed as a basis of promotion and classification, if not as a means of testing the results of instruction. The promotion of pupils on the recommendation of teachers exclusively, or by classes without reference to their relative attainments, is subversive of all proper classification ; and especially, is this true in a system of schools comprising several departments of the same grade. Teachers differ widely in skill and efficiency, and as a general rule, the more superficial the teacher, the higher his estimate of the attainments of his pupils. Hence, the relative standing of pupils must be determined by the application of some uniform test ; and the more thorough and comprehensive this test, the more complete, other things being equal, will be the resulting classification.

But whatever may be true of the necessity or value of test examinations as a means of classification, they are very generally employed for this purpose ; and *their character largely determines the character of school instruction*. If the examination tests are narrow and technical, the instruction will be narrow and technical ; if the tests run to figures, the instruction will run to figures ; if the tests demand details, they will "emphasize and make imperative all the lumber of the text-books ;" if they cover only a part of the studies, the non-test studies will receive little attention. Indeed, it may be stated, as a general fact, that school instruction is never much wider or better than the tests by which it is measured. This is specially true when examination results are used as a means of *comparing the standing of schools and the success of teachers*. On another occasion, I cited the statement made to me by the principal of the first grammar school in one of the largest cities in the East :

"My success as a teacher is measured by the per cent of correct answers my pupils give to the series of questions submitted in the examinations for promotion to the high school. Whatever qualifications these tests call for, I must produce or fail. I cannot stop to inquire whether my instruction is right or wrong. *I must prepare my wares for the market.*"

Few teachers can resist the grooving influence of such a system, and in spite of it, teach according to their better knowledge and judgment.

This tendency to mechanism is intensified by the demands of classification for *uniformity* of progress, and as a consequence, of results. The adoption of definite courses of study with sub-divisions corresponding to the number of classes, all following each other in regular order, necessitates the mastery of each of the successive portions as a preparation for the next higher.

When the pupils in the lower classes or grades are sufficiently numerous to occupy each several rooms under different teachers, the progress and attainments of the pupils in the several sections of each class or grade must be sufficiently uniform to enable them to come together in the upper classes or grades. This necessitates uniformity of results, and as a consequence, a good degree of uniformity of instruction. To secure this uniformity, the course is mapped out in minute details, and the time to be devoted to each portion, the order in which the steps are to be taken, and even the methods of teaching are sometimes definitely and authoritatively prescribed. As a consequence, teachers are not free to teach according to their "conscience and power;" but their high office is degraded, as I once put it, to the grinding of prescribed grists, in prescribed quantities, and with prescribed fineness, to the turning of the crank of a pedagogical machine. It is just here that *the mechanism of the graded system may touch the very life of the system.*

To correct this and other like tendencies to routine and mechanism, is the most difficult problem in school administration, and the right solution of this problem clearly requires the wisdom and the skill of the expert in school education. This leads to and suggests the answer to the practical question :

How can supervision improve and vitalize school instruction and training ?

I answer, that this result is to be chiefly reached by *the training, grading and inspiring of teachers*; and I cannot state the reasons for this answer better than by using a paragraph written for another setting.*

* "Several Problems in Graded School Management," a paper read before the National Educational Association, 1874.

"The supervising principal of a public school in a large city once said to the speaker: 'It is idle to ask my teachers to read professional works. They follow the prescribed course of study, and look to me for their methods. Their ambition is to do their work precisely as I direct, and they do this without inquiring whether my methods are correct or incorrect. It is enough that I prescribe them.' It seems unnecessary to say that this prescribed uniformity in both the matter and method of instruction, is subversive of all true teaching. Carpets may be woven, garments made, and stone carved by pattern, but the unfolding and informing of a human soul is not the work of operatives, following appointed forms and methods. The human soul is not touched by the revolving cogs of mechanical methods. True teaching requires the artist's hand, and the artist's spirit. Fruitful methods may be evoked; they can never be imposed. They must bear the impress of the teacher's image, and pulsate with the life which he breathes into them. The vital element in every method of instruction is *what the teacher puts into it*, and hence the prime fact in every school is the teacher. It is not enough that graded schools go through with the forms of a philosophic course of instruction. The knowledge to be taught may be wisely selected and arranged, the successive steps may follow each other in natural order, and the entire mechanism may be so perfect that the revolving cogs touch each other with beautiful precision; and yet, if the whole be not vitalized by true teaching, the system is a failure as a means of education. The one essential condition of success is the informing, vitalizing spirit of free, earnest teachers; and the more philosophical the system of instruction attempted, the more essential is this condition. A routine of mere book lessons may be conducted by a blind plodder who can turn the crank and tighten the screws, but a system of instruction, having for its grand end the right unfolding and training of the mind and heart, requires the insight, the invention, the skill, the inspiration of the true teacher. We are slow in learning that philosophic methods of

teaching are practicable only to those who have some insight into their principles. The oral teaching in our schools is often as deadening as the old text-book drills. Some of the object-lesson teachers out-Herod Herod in mechanical teaching, and, if I were obliged to choose between the text-book grinder, and the crank-turner of prescribed object lessons, I should unhesitatingly take the former, with the assurance that he would have something to grind."

All that has been said leads to the conclusion that supervision is of doubtful worth when it exhausts itself on the mere mechanism of a school system. It is true that a good degree of uniformity must be secured; but this result can and should be attained without grooving the teacher's instruction, or sacrificing his personal freedom and power. An experienced superintendent once remarked that his chief business was to keep his teachers "out of the ruts." To this end, the superintendent must be qualified, I repeat, to instruct, inspire, and lead teachers.

I cannot conclude this paper without confessing that I am fully aware of the fact that it contains nothing new. I once heard a distinguished citizen of Massachusetts ably advocate the importance of what is called, in this paper, professional or vital school supervision, but his views were stated with the apparent consciousness that they would be a revelation to the teachers and superintendents who largely constituted his audience. And yet, there were at least a score of superintendents sitting before the speaker, who had grown gray in doing worthily the very work which he so eloquently and cogently urged.

The earnest words of this paper have sprung from a conviction that what is, perhaps, exceptional in school

management, should be universal. What is needed is the recognition of the true function and nature of supervision, not only by teachers and superintendents, but also by boards of education, and all other officers entrusted with the direction of schools. It is high time that the American people generally realize that the greatest enterprise of this age, the right education of youth, should be committed to the direction and oversight of the wisest and most skillful educators in the profession.

TWO IDEALS IN EDUCATION.

Abstract of Lecture by F. W. PARKER, Principal of Cook Co.
(Ill.) Normal School.

Mr. Parker said two ideals of education divide teachers into two distinct schools of thought and method. One idea is the harmonious development of body, mind, and soul. Under this ideal the highest good of the individual lies in the full, harmonious growth and development of all germs or faculties existent in the mind at birth. Knowledge of three things is absolutely indispensable to the real art of teaching — the growing mind, the means of growth, and the adaptation of means to growth. He classified the science of teaching under five directions for study and research, as follows: The mind and its laws; the branches of study — their order and logical development; the arrangement of these branches into a system following the laws of mental growth; the adaptation of the system or means of development to the general laws of the mind; the knowledge of individuals, and the particular modification of methods necessary for their especial growth. The last study is the culmination and result of the preceding investigations. In fact, these studies form one complete whole, each absolutely essential to the other; for one may know psychology and not be able to take a single step in teaching. The science of teaching is in its infancy.

The great need of to-day is to appreciate how little we know, how much there is to be learned, and the selection of a right ideal or motive; a motive that will lead us in the right way, however slow. The second ideal is that of quantity. The principal requirement, under this ideal, is a certain predetermined, fixed quantity of knowledge and skill in a given time. There is no greater error in teaching than failure to adapt the subjects taught to the learning mind.

The great demand now is for industrial schools and manual training. Teachers should heed the cry, or the rush of the people in this direction will damage and perhaps destroy much that is good in our schools. Training children to work, to love work, to work systematically, and put brains into their work, is the fundamental idea of mental development. So far as manual training will assist in mental development, let us have it in our public schools. But do not determine that a class of poor boys shall follow a certain trade. Let us have no class schools. The education is the formation of the character. There can be no education without moral or immoral development; therefore make the formation of that character the principal object.

X.

THE EDUCATION WE NEED.*

BY DR. JULIUS H. SEELYE.

Before discussing "The Education we Need," it may be appropriate to say a few words upon our need of education.

There has never been a people for whom the need of general education is more impressively recognized, or where its benefits have been more conspicuously exhibited, than by the American people.

Without dwelling upon this, however, to too great an extent, let us inquire into the kind of education, which the American people really need. In the first place, we need to recognize, in our system of education that the lower schools depend upon the higher. Higher schools do not grow out of the lower by any process of evolution; the higher schools are the parent, and not the child, of the lower schools. It would be very easy to show this from the nature of the case, but it is quite clear from the actual history of education. We sometimes talk about our educational system as a pyramid, with broad base and gradually narrowing range, until we reach the top. But that is a mechanical analogy, found only in the desert, and fit only for the desert. The true analogy is the living process—where the living plant grows out of the living seed, and has all its buds and blossoms, all the roots and

* Abstract of the address furnished by a reporter.

fibres, determined by the movement of the germ from which it has unfolded. Harvard College, founded less than sixteen years after the landing of the Pilgrims, and six years after the founding of Boston, is the oldest educational institution on the new continent, with the possible exception of the Boston Latin School; and this, our oldest educational institution, has been the primal source of all the streams, rivers, rivulets, and rills, which have been flowing through every city, village and hamlet in the land. The very first order that was made upon this continent, by legislative action, for public schools—(enacted by the united colonies of Connecticut, in 1644, and copied and declared in the same terms by the Colony of Massachusetts, in 1647), reads: “In order that the youth may become *fitted for the university*.” We see here that the common schools did not start first; before them were universities, then came the schools. We should fit for the university, and then in the natural order of the schools we should fit for the high school. It was the college first, and the high school next, and the common schools afterwards. And this has been true, also, in Europe—in all Christian Europe—the first schools were the Cathedral schools—schools of the church, but never intended for common schools, nor for the elevation and education of the whole people. Charlemagne, the greatest legislator in educational matters, I think, of modern times, if he did not start the University of Paris—respecting which there may be some uncertainty—did start the great schools which were on the same basis as the universities. To be sure, the conception of a university then was very different from what it is to-day, but it was for higher education; the common education—the education of the

masses — grew out of it, and came from it. This has been so all through.

We find, also, an illustration of this same principle in the history of great men. The appearance of great men is sometimes assigned to the law of heredity, by which, and by the environment of the race and the generation, there have been brought out at a certain time certain men, the outcome or the full efflorescence of the life of the time. There is much truth in the doctrine of heredity ; but it does not cover the whole ground. The law of heredity does not satisfactorily explain the history of great men. What law of heredity will account for Moses or Confucius, for Socrates, Luther, Napoleon, Cromwell, or Abraham Lincoln? The great man is a great gift to his time, and just as truly the producer of his age as the product of his age. Great men are given to man. We start on the higher platform and build up from there.

This fostering of the lower by the higher, also makes it sufficiently clear, that it is not at all unjust to levy taxes for the support of a high school, though but few may attend. The few will be the educators of the many, and the high school will be the source, for origination and growth, of the lower school. This principle needs a special insisting upon at the present time, when we have so many superficial notions from the public press and platform, respecting the matter.

In the second place, the kind of education that we need is very largely an education in language. and I am not sure but it is most largely in language, — for language is not only the form in which thought is expressed, but it is the very body of thought itself ; hence, no single achievement of thought has the power to discipline

thought that language has. We need, therefore, to insist more and more, upon the culture of language in our schools, and we cannot find ourselves in any condition of progress, soundly, and thoroughly, and vitally, unless we make language prominent. The child that is to form a part of the nation into which he is born, and who is to take up and understand the life of the people with which he is to be connected, and of which he is to form a part, needs to be taught the language of the people.

But here the question arises, Shall this instruction be confined to the mother tongue? Or, if we go out in wider ranges, shall we instruct in the modern languages, or shall we be satisfied, as the world has been so long, with the ancient classic tongues? Such a question is very easily prejudged, and very often misjudged.

It is sometimes asked, "Why are not the modern languages just as good for educational purposes as the ancient ones?" But experience answers, because they are not so happily adapted to education as are the classical tongues. The proof of this is before us; and we shall make a great mistake if we set it aside. There have been, recently, some careful investigations respecting the process of education in the colleges of France, resulting in this uniform conclusion:—That wherever there has been in the college a classical education preliminary to the education in the modern languages, the student in the classics has made far more progress in far less time, than the student who had no previous classical training. The same fact has been observed in German education. You are familiar with the remarkable experiment that has been in progress in the last ten years in German universities upon this point.

An experiment has been recently made in Amherst College in the same line. A few years ago it was thought desirable at Amherst to give special opportunity for scientific students to carry out a course of instruction in science separate from the classics, and hence, a very thorough scientific course was organized, covering four years. After about ten years' experience with this late method, we have found that in every case — without a single exception — the best scientific students have been classical students. We have had quite a number of scientific students who have entered upon the course and have carried it on with success, but we have never had a scientific student, so-called, who has equalled in his scientific range the classical student; and hence, it has seemed to us that it would not be wise to continue the course even for the sake of the science itself. It is not desirable, looking at it simply in reference to the scientific training, to undertake to get a scientific training without a classical basis. Hence it would seem that we are imperilling our education in a very vital point, when we undertake to eliminate from it classical education, or even when we undertake to put modern languages in place of the classics.

But while an education in language is most advantageous for instruction in knowledge and discipline of thought and sentiment, there is a discipline of the will which we need, and this brings us face to face with the question of moral education. We have a need of moral education quite as impressive as of any other. I sometimes think there is a singular want of tone in our moral fibre as a people. I remember one time, seated on the piazza of a hotel at Yokahama, where a Pacific Mail Company's steamship was burning up in the harbor, a

wealthy individual, who had been a fellow-passenger with us on the same steamer, sat by my side and said, "I should like now to sell 'Pacific Mail' short;" and said it without any reluctance, without any thought, apparently, of the essential immorality and injustice that was therein involved. He had come to a knowledge of the great loss of the Pacific Mail Steamship Company, and he would like with the knowledge to cheat somebody else by "selling short" on this stock. Is there not a great deal of this same spirit manifest among us? Do we not need a sounder moral education? But a moral education necessitates a religious education. The question need not be discussed from theory or from general principles; the actual fact is quite sufficient. There has never been any moral education in the world except on the basis of a religious education; that is, a moral education of the masses — in respect of great movements of society. You may find sporadic instances, individual cases here and there, of persons who may have had moral education without a religion. But there is not in history any record of a great upheaval of a nation, of a great moral uprising of a people, except through a religious inspiration. In religious inspiration there is that which we need to give tone, to give fixedness, to give power to the moral life. The system of Confucian ethics is a lofty and rigorous system of morality but it does not make the Chinese virtuous. However severe, rigorous, and pure it is, and however constantly it is taught and inculcated in the Chinese schools, it does not bring the Chinese pupils into a high life of morality. Wells Williams, in "Middle Kingdom" says: "There is no virtue so prominent in the Chinese ethics as sincerity, and no vice so prominent in Chinese life as du-

plicity. The teaching of morals to men does not make them moral; teaching them what virtue is does not bring them into the practice of virtue.

I understand the objections which come here: "Why not leave this to the church?" "To the family?" But why not leave your whole education to the church and to the family? Simply because this is a matter of too much consequence to the State to be left to any such agencies, — simply because human nature has a most singular disposition to throw away its privileges, and is doing it all the time. Give it high endowments and raise it to a high position, and still human nature comes down from the higher plane to which you have lifted it. You have got to have that which shall keep it, and in order that there shall be true education in morality there must be true education in religion.

No man ever does his duty in this world simply because he knows what his duty is, unless he loves it. No clearness of knowledge ever leads an individual soul into the doing of its duty. And that love of its duty can only come through a personal relation to a personal God, to a divine sovereign, a supreme spirit, whose will decrees what is right and just, and who demands in his own sovereignty, in the exercise of his all-wise and all-loving government, obedience to his will.

XI.

MORAL CHARACTER THE END OF EDUCATION.

BY MISS ELLEN HYDE, FRAMINGHAM, MASS.

It is a happy omen for the future that this subject of moral training, or the development of character (which is the same thing), occupies so prominent a place in our thought, as is indicated by the constant discussion of it, not among teachers alone, but in the daily and religious papers and popular magazines; but it is a curious commentary on our present attitude that the discussion is almost always formulated in such questions as these: "Shall there be moral training in the public schools?" "How much time and attention should be given to development of character?" "How can we give moral instruction without religious dogma?" etc., etc.

As well might we discuss whether there shall be *breathing* in the public schools, and how much time and attention it is wise to divert to the exercise! So long as we have living children in the schools, we must have breathing there, and just so long, and just so constantly, too, we must have development of character there. The only questions we are competent to decide are whether the breathing shall be of pure and health-giving air, or a slow but sure poison, whether the moral training shall tend to moral health and symmetry, or to vice and destruction. It may seem a needless exaltation of platitude and truism to say that we are moral beings; yet it seems to me that the weak point in most of our talking

and thinking on this subject lies in our obliviousness to that fact. We are too much in the habit of talking about our moral nature, as if it were a thing by itself which could be exercised and educated, or neglected by itself, and of overlooking the fact that the trinity of our nature is a trinity in unity, no part of which can for one moment exist or act alone, and no part of which can be educated alone. There is need of emphasizing the fact that we are moral beings, and that therefore every act and every thought has a moral aspect, and, according as it is right or wrong, is moulding the character for eternity. We need to put out of our minds as quickly and as thoroughly as we may the absurd idea that moral training *can* be relegated to the church and the home, and to plant ourselves firmly on the immutable truth that moral character *is* the end of *all* education. Intellect, sensibility, will; this trinity of our nature God has joined together, and no man *can* put them asunder. We choose only when we feel; we feel only when we know; and on the other hand, knowledge necessarily produces feeling, feeling necessarily produces choice. But in this constant reciprocity of all our powers, the intellect — the knowing faculty — is the lowest, and useful only as a means to what is higher. Knowledge, even though it were infinite, is in itself, utterly worthless; it is only as a means to noble feeling and right choice that it becomes of value. The *choice* is the *end*; and in the choice is the character. In all the hundreds of choices which the child makes in the course of every school day, with conscience always whispering, "You ought to do this," "You ought to do that," his feet are being turned, imperceptibly perhaps, but irresistibly into the upward or the downward road. No, he cannot leave

his moral nature behind him when he comes to school, to be worn with his best clothes to church on Sunday ; every arithmetic lesson is, by the necessity of his nature a moral lesson, and all his daily work, and associations, and training are developing his character.

It being true (and I have spent too much time in illustrating what we all know), it being true that development of character is, by God's appointment, the end of education, in the sense of its necessary final result, would it not be the part of wisdom to make it our end in educating, in the sense of the thing aimed at ? If we set up for ourselves some other end, "we shall haply be found fighting against God." Yet, is not this exactly what we are doing in our public schools ? All our thinking on education is based on the false assumption that intellectual and moral education can be separated ; and having made that assumption, we have set up as the end of our work the training of the intellect. We hope, of course, that the children may grow up to be good men and women ; but our business is to make them good *scholars* ! Under a government more dependent on the character of its citizens than any other ever was, we have elected to give to the comparative certainty of the schools, the teaching of reading and writing, and to leave to the absolute uncertainty of the church and the home, the training in honesty, chastity, temperance, patriotism, "and all those other virtues which are the ornaments of society, and the basis on which a republican constitution is founded !" I will not spend your time in multiplying proofs of this assertion. If any one needs them, I refer him to the last report of the Superintendent of Schools of the city of New Bedford. But it seems to me that the strongest proof that we are

working for a wrong end is found in the results of our work. If we set up as the end of our education that which by its nature can never be an end; if we endeavor to develop the child's mind in opposition to the laws of that mind, we shall, as I have said, "be found to fight against God," and we know what results to look for in such an unequal contest. These disastrous results I believe we see in our schools to-day. I believe that all the faults of our modern intellectual training are either directly or indirectly due to this false aim. Its unreality, its nervous hurry, its cram, its superficialness are the natural outgrowths of an attempt to *know*, rather than to *be*. And we have those faults. Our pupils study arithmetic constantly, from the age of six to fourteen, and at the end of that time (taking our schools through) not one in fifty of them can add a column of figures quickly and accurately; they spend about the same length of time in the study of language in some of its many branches; yet after it not one in fifty can read, write, or speak his mother tongue correctly and fluently, or has a real taste for good reading; they spend a less, but still a considerable time in the study of natural science; but it would be a wild assumption to claim that one in fifty carries a practical interest in botany, or zoölogy, or chemistry beyond his school days. It is a grief to think of the time spent in Latin in the high schools; but how many of their graduates can read a page of Latin at sight, or have any knowledge of, or interest in, the noble literature of that language? Yet the acquisition of knowledge in these branches, and others, has been the aim of their work.

If instead of thinking and talking of this intellectual work as the *end* of the school, parents, teachers, and

communities had regarded it as only a means of producing strong, well-balanced, and reliable characters for practical use in the high art of living, this work would have been better done.

More natural courses of study and methods of teaching are doing much in these days to remedy these defects, but these are, after all, only the externals of education, only when we substitute the right for the wrong aim, will all the parts of the child's training fall into their natural and harmonious relations to each other, and to his life, only when we interrogate the various branches of study as to their value, and their function in character-building, shall we be able to give them appropriate time, only when we regard them as elements of usefulness and success in life, will they be pursued with real zest and profit.

Accepting the absurd falsehood that "Knowledge is power," and making intellectual training an end, we at once separate the school from the rest of the child's life, make it unpractical, and take away his natural motives for work; then we are obliged to substitute unnatural motives in the shape of examinations and promotions; their result is cram. Character alone is power; knowledge is only a tool for power to use; as we find happiness only when we make usefulness our aim, so only when we make moral character the end of our education, shall we achieve the truest intellectual development.

But this is not the most important aspect of the subject. The free public school is the child of the State. Its only excuse for being is that it is the nursery of citizenship, and in that fact lies the chief reason for making moral character the end of its discipline.

We have no means of knowing just how far our public schools influence our national character. We do know that the majority of our criminals are imported, and that for them the schools cannot be held responsible. But we see in the higher ranks of our society, among our native population, the outcome of our schools, an eager rush after wealth and material prosperity, a growing bluntness of moral perception, and an increase of certain kinds of crime. We can but ask ourselves, "How far are the schools responsible for these things?" The forgers, the defaulting treasurers and cashiers, all those genteel criminals who are interviewed and reported in the papers, as well as the scores of prominent citizens who sign petitions for their pardon, and the governors who pardon them have come out of our public schools. The unscrupulous rulers of the stock market, many of our most venal politicians, the men who put such politicians into positions of dignity and power "just for the fun of it!" and the men who do not vote, and take no part in politics, because they will not soil their fingers with the nasty business; they are the outcome of our public schools. They are the product of our entire civilization as well, and we cannot know how far the schools have helped to make them what they are; but one thing we do know, mere intellectual training never did make, and never can make a good citizen, or a good man. And our schools are not doing all they ought, to remedy these evils. To cultivate the intellect is to make a good tool; to ensure the right use of that tool, we must cultivate moral character. We cannot but fear a connection between the crimes which grow out of an undue estimate of the mere means and accessories of life, and an education which substitutes means for ends,

and exalts knowledge above virtue. One other thing we know ; the public school is the only good influence we are sure of. Multitudes of the children in them have no homes worthy the name ; they come under no religious influence. The State cannot select the fathers and mothers of its citizens ; it cannot oblige them to go to church ; it can choose their teachers, and it can oblige them to go to school. Over all this broad land, for native-born inhabitants, the road to citizenship lies through the public school. For from six to twelve years, the future voters, and legislators, and governors, and presidents, are subject to its influence. It is our only hope. Can we afford to have its influence negative or doubtful ? There can be but one answer to the question. The salvation of our republican institutions lies in the moral character of the schools. If they are to produce good citizens, men and women, who shall keep intact the beautiful inheritance we have received from our fathers, they must give moral training ; their whole moral influence must be good, and the development of right moral character must be their end and aim.

We here come face to face with the question, "Can the moral training which is necessary to the production of fine moral character be given without religious dogma ?" Is it possible for teachers to train their pupils to be honest, industrious, temperate, truthful, chaste, kind, and self-sacrificing, without giving a denominational bias ; to teach love to God and man, without a sectarian tinge ? Many teachers find it not only possible, but easy.

The supposed difficulty grows out of the mistaken idea that morals are an outgrowth of religion, and based on the Bible, and forgetfulness of the fact that we are

moral beings, "made in the image of God." Our moral nature is older than the Bible, and "Thou shalt not steal," "Thou shalt not kill," "Thou shalt not bear false witness," and all the rest, were written there before they were written in the Decalogue. Every child in our schools has that within him which tells him he ought to do right, and ought not to do wrong; and, whether he has ever heard of the golden rule or not, he knows that right consists in doing to others as he would have others do to him. He knows, too, that if he does right, he deserves approbation, and if he does wrong, he deserves punishment, and I believe that he has from the same source, when he is old enough, a knowledge of a great and beneficent First Cause. If we had not this moral nature, the Bible and the religion founded on it would be as meaningless to us as color to the blind, or music to the deaf; and government, whether in the school, or in the State would be impossible. *With* this moral nature what more do we need for moral training? I sincerely believe, that other things being equal, or other things being very *unequal*, the most thoroughly religious man or woman will be the best teacher, but I *know* that very effective moral training can be given without reference to creed or Bible, and without arousing sectarian prejudices.

Is there any other difficulty in the way? Absolutely none. Yet a superintendent of schools said to me a few days ago, "I cannot make teachers attend to the moral part of their work; they simply will not do it."

What is the reason that they will not do it? The school committee, the parents of their pupils, the public sentiment of the town and the State do not require them to do it. What is the influence of one man, with-

out authority, against such overwhelming odds? If the committee had made searching inquiry into the character and moral influence of those teachers before engaging them; if parents came to them even half as often to remonstrate against some moral negligence, or make some suggestion about moral training, as they do to complain of their children being "kept back," or to talk about their promotion; if they knew that their methods of government were judged by a high moral standard; and that they would be just as surely dismissed for bad temper, or ill manners, or neglect of moral lessons as for a failure in teaching arithmetic, there would soon be a different state of things. The difficulty lies not in the doing of the thing, but in bringing the public sentiment up to demanding it.

It is also true that good teachers bent on attaining this highest end, are often effectually hindered by a public sentiment which makes acquisition of facts the end of education, and is criminally indifferent to the moral tendency of the schools and their surroundings. Public sentiment will soon right any wrong which it appreciates, but who shall right the public sentiment? It is a hopeful sign that this subject occupies an increasingly large place in the public mind, and that some voices that must be heard are warning us of our mistake and our danger. In order to elevate the aims of the schools, we must first elevate the ideas of the communities in which they exist. We need a great influx of spirituality, in its broadest sense, which like a mighty flood-tide shall lift us off the flats and shallows of a satisfied materialism, where we are in danger of being stranded, which shall make us care less for the shows of things, and more for the eternal realities. When we

have higher ideals of manhood and womanhood, we shall believe that "growth in learning is bound up with growth in character," and that moral character is the end of education.

DISCUSSION.

BY REV. DR. A. A. MINER.

I think after the meditations suggested by the paper to which we have just listened, we are brought to feel as we have felt a great many times before, that there is nothing more important, nothing that so underlies all human welfare, under whatever aspect, as does the question of moral education.

I do not mean thereby to leave out the necessity of teaching spelling, or arithmetic, or geography; for all our attainments should and must flow into the moral considerations.

In fact, the mischief of the world's religion hitherto has been the doctrine that God has only done this, that, and the other thing for his own glory, and we to-day unfortunately I think, put a little stronger emphasis on the sovereignty of God than on the paternity of God. And it is this coldness of the world that has left character undeveloped.

We are social beings; but we are not social simply because it suits our inclination. We are possessed of natures that link us one to another indissolubly; that is what makes solitary confinement in prisons such a terrible punishment, and a terrible danger if too long continued. That is what makes city life so polishing on the one hand, so uplifting in some of its circles, and so demoralizing in others. Hence, in the school-room, in the home, in the street, there should be a steady manifestation of that social element in man which recognizes the divine law — divine, as was well said, because written in man before written on the sacred page, and written on the sacred page because it is in man—"Bear ye one another's burdens, and so fulfill — or, if you will excuse me for dividing and transposing that word, giving more clearly to our present ears all its meaning — *fill full* the law of Christ."

I wish to say, here, a word or two also, upon the relative import-

ance of science and language in the scheme of education, as presented at this meeting by President Seelye. Has it ever occurred to you that when we deal with language we deal with what man has done, with what man has thought, with what man has wished or not wished; but when we deal with science we deal with what God has done, with what God has thought, with what God has wished. If this is so, can it be that our training should take more cognizance of the fruitage of human endeavor, than of the Divine endeavor? I do not advocate instruction in science to the exclusion of instruction in language. I do not mean that we should turn entirely from the classic tongues; for the study of language, recording as it does the experiences of the human race will enable the pupil, if he reads deeply and wisely, to become acquainted with the past workings of the providence of God in human affairs; and, undoubtedly the weighing of words, the translating from one tongue into another; the necessity of thus considering the drift of thought in its subtler phases, will, if continued year after year till it becomes habitual, build up a judicial style of mind, and enable the pupil to use language with an accuracy that otherwise would scarcely be possible. But there is something in the way God has embodied his thought in the wonders of nature about us, some of the more striking of which are but just being brought to light, that must deeply touch the heart of man. The undevout astronomer is mad, was the saying of the scientists of long ago; but how much more emphatically must we remember that he who fails to feel reverence for God in the presence of the sublimities of nature unfolded by science is undevout and irreverent.

Finally, in regard to the study of modern languages as a substitute for the ancient ones, it may be that the modern are not as well adapted to try the mind and the judgment in all directions as the ancient tongues. But we study the classic tongues for years and the modern tongue for a few months only, and then say we have not so much culture in the one case as in the other.

In attempting to decide what, and how much, is necessary to the highest cultivation of our youth, we should always bear in mind that the works of God should never hold a secondary place to the works of man. The question should be, how much relative time should be given to the works of man, or if you please, to the ancient tongues, to enable one accurately to state and apply the wisdom that may be drawn from the works of God?

R

XII.

BRIEF ADDRESSES.

THE PRESIDENT : In my early days I tried to keep school without programme. To-night I shall try conducting this meeting without a plan. Please take the work into your own hands, and each speak for yourself what is uppermost in your mind. I shall first call upon a friend who comes from away down East, Mr. George T. Fletcher, of Maine.

After a few preliminary remarks, Mr. Fletcher, speaking for Maine, said :—

SPEECH OF MR. G. T. FLETCHER, OF MAINE.

Maine has made educational progress not so rapidly as we could wish, because there have been many obstacles in the way; but our progress has kept full pace with our increase of population. That may not be saying much, because we may have but little more than held our own in population; but there has been a reason for that. All the States in the Union have made frequent and severe drafts upon the "Pine Tree State" for men; throughout the length and breadth of the land to-day in all professional vocations may be found the sons of Maine. One result of this exodus from our State has not been a bad one. The old district plan of school—that weak organization—has become weaker as the towns have become decimated, so that this institution, which has outlived its usefulness, is now passing away. Many of our towns and cities have adopted the town plan, and we have excellent graded schools, and teachers equal to any that are to be found. There has been progress, also, in the matter of supervision, and many towns are now seeking for further measures by which they can secure more efficient supervision. The leading cities of the State in wealth

and population, such as Portland and Biddeford, have school boards, well graded schools, and employ superintendents to devote all their time to the advancement of the schools. Other towns and cities are also following in this direction. We have three normal schools located in three different sections of the State, which are sending out, year after year, well-trained teachers, and the results of their work are felt throughout the State.

The President next called upon Dr. Baldwin, of the Texas State Normal School.

SPEECH OF DR. BALDWIN, OF TEXAS.

Texas is a State of boundless possibilities. The most prosaic statement of facts concerning this wonderful State seems like wild fiction. In area, Texas is equal to fifty-two States as large as Connecticut. Her population has doubled within a decade, and promises, within a quarter of a century, to equal the population of New York and Pennsylvania. In the production of cotton, cattle, and sheep, Texas now leads all the other States, as she will probably do in the near future in the production of sugar, cereals, and fruits.

With her marvellous mineral wealth; with her extraordinary manufacturing facilities; with her net-work of great national and international railroads; and with her thousand miles of sea-coast, Texas is destined to become a great manufacturing and commercial State. Fanned by the gulf breezes, Texas has a climate singularly mild and genial, and healthful. Texas is becoming eminently cosmopolitan, and nowhere are life and property safer.

How to educate the millions that are in Texas, and are pouring in from all lands, into homogeneous, intelligent, moral American citizens is a problem of appalling magnitude. The Texas Fathers dedicated 50,000,000 acres to education, and thus laid a broad and enduring foundation for popular education. On this foundation Texas statesmen and educators are steadily and wisely building an efficient school system.

The State University, besides other large endowments, has more than 2,000,000 acres of choice land. Each county is given 12,000 acres for public schools. After selling several million acres, the State has 35,000,000 acres—sufficient to swell her permanent

school-fund to more than \$100,000,000. The present legislature has submitted constitutional amendments to supplement the above resources by a State school-tax sufficient to sustain the schools for six months annually. Provisions are also made for local taxation, to build school-houses and extend the school term. From the primary schools to the university, regardless of race or color, Texas extends equal educational facilities to all.

For four years Texas has sustained two State normal schools, one for the training of white teachers and one for colored teachers. Board, books, and tuition have been furnished to students. The State also sustains a normal institute for four weeks annually in each senatorial district, for white teachers, and in each congressional district for colored teachers. Excellent graded schools have been established in a large proportion of the cities and villages. The agricultural college has been in successful operation for several years. The State university will open in September.

Besides her State schools, Texas has a large number of prosperous schools and colleges of which she is justly proud. Profiting by the experience of other States and nations, Texas is struggling to maintain a school system pre-eminently Texan, but equal to the best. Proud as she is of her material greatness, Texas is more ambitious to use all in the production of grand men and women. Though no longer the "Lone Star," we may modestly claim that Texas is the rising star in the American galaxy.

Hon. B. G. Northrop, of Connecticut, was then called upon.

SPEECH OF HON. B. G. NORTHROP.

In Connecticut, I think, there is one point in which we may claim some pre-eminence, and that is in the large proportion of attendance. A dozen years ago a rigid compulsory law was proposed in our legislature. Our leading politicians on both sides dodged it, pleading "the laboring classes will not stand it." But it passed, and from no Labor Union, from no representative of the laboring men, has there been uttered one lisp of objection to this rigid law of compulsory attendance. I would not advocate such a measure in every State until public sentiment is ready for it,—certainly not in the Southern or some of the Western States.

But where the sympathies of the people will warrant it, as they do in Connecticut, it is a wise enactment. The law with us has greatly increased the attendance. We have an efficient, earnest agent constantly occupied in enforcing the law, and we require in the enumeration—given under oath—of all non-attendants a specification of the ages of these non-attendants. If under five, or possibly under six, no question is asked—but from that age up, if there comes to the central office any report of non-attendance, the matter is investigated, and if needed, either employers, manufacturers, or parents prosecuted. The moral sentiment that has been awakened enables the officers to enforce the law.

The President then introduced Prof. Dibble, of Charleston, South Carolina, who said :—

SPEECH OF PROF. DIBBLE.

I come from a State that is very much interested in education, and I may say, that we have shown our interest by our works. The Governor of South Carolina to-day, was the State Superintendent of Education last year. He went about among the people, talked to them in behalf of this great cause, and the people thought they could not show their appreciation of him and of his work in any better way than by putting him in the gubernatorial chair, and we expect he is going to be one of the best governors that South Carolina has ever had.

There is a mistaken notion prevalent with many, that the South has no school systems; that we don't feel the interest that we ought in this great subject. But, on the contrary, all the Southern States have school systems. Dr. Smart, while at Atlanta, told the Georgia Legislature a few years ago, that in many particulars the State system of education in Georgia was, in his judgment, the best of any in this broad country. The trouble with the South is not that it has not the system, but that it is not able properly and earnestly to carry out the systems that have been adopted. No one can conceive of the difficulties that face us—in the way of means. The problem that we have to solve is a very difficult one, and one that it seems impossible for us to bring to a successful solution, if left to ourselves and our own resources. We need

NATIONAL AID, and it seems as if our servants at Washington ought in this matter to hearken to what is undoubtedly the sentiment of the country. If we could only be assisted in bearing the burden which is too heavy for our own shoulders, it would not be many years before there would be afforded, all through the South, educational advantages which might be compared even with those offered in New England.

State Superintendent Patterson, of New Hampshire, was then introduced.

SPEECH OF MR. PATTERSON.

After referring to the Granite Hills of New Hampshire, which surround the place of meeting, Mr. Patterson said:—

The distinguished President of Amherst College told us that the study of language was the great instrument of intellectual culture. But there are other languages more worthy of our attention than those which have come down to us from Greece and Rome. God has given us his thought in the everlasting hills, and in these beautiful valleys that stretch out before us. And, when we study the geology of the earth, when we study the facts and the phenomena of this material universe, we are running back through the moral and the material government of God, to the very birth of the creation. We study these hills that we may learn the thought of the great author of Nature, and grow stronger and better by that study.

There are, also, still other languages spoken by men than the Greek or the Roman, that are worthy of our study. When Raffælle puts the Sistine Madonna upon canvas, or the Transfiguration, he has given us those sublime conceptions that floated through his intellect, in language so beautiful that it will never die. And so when we study the Pantheon or the Parthenon, do we not get at the thought of the grand old masters of the early world? We analyze Homer, that we may get at the sources of the language in which he wrote, and learn its power. But we may also analyze a steam-engine or a cotton factory, and it will give us just as truly a history of civilization as Homer's Odyssey or Iliad. When we study the useful arts of life, which have made our modern world

what it is, are we not learning the language in which the thought of the world is spoken? In the study of the practical arts of life, we are learning that language which has added to the material power of the world, and carried us forward and far onward from the position occupied by the ancient world. We may study the thought of the modern world in all its machinery, and in those great forces of civilization which have made it what it is.

General Eaton, United States Commissioner of Education, was then called upon, and spoke as follows:—

REMARKS OF DR. EATON.

These gatherings of teachers at the meetings of the American Institute of Instruction present illustrations of that educational progress which statistics show to be going on in all parts of our land. The South, to-day, is giving renewed attention to teachers' institutes, and is holding them for four or six weeks instead of one week as has been the custom in other States. The South feels the peril of its situation, but it also knows that it cannot levy the necessary taxes without practical confiscation of property—the taxes necessary to pay the teachers and to educate all the children. Why, Charleston, S. C., is levying a larger tax per dollar, to-day, for school purposes than the city of Boston; and so with various other cities and localities in the South. Hence the overshadowing question: Shall the Nation second the efforts of the State by granting National aid?

To-day immigration flows into the country at the rate of three-quarters of a million a year—an immigration larger almost than any that occurred in Europe when it was said that avalanches of people went from one section to another. For all these people there is no provision, no law by which they can organize school districts. Shall the agricultural interests of the country have four and one-quarter millions appropriated annually for their uses, and education only \$50,000 annually? Have the teachers of America nothing to say? Let us remember these people. Let us act for them. Let our vision be extended enough so that we can take in the whole situation; and let our sympathy be so earnest that we shall take hold of the work, and see to it that the Congress of the United States is no longer at fault in this matter.

The President then introduced William Mather, Esq., of Manchester, England, a representative of the English Commission inquiring into educational matters in this country. Mr. Mather was received with great applause. Prefacing his remarks with a few complimentary allusions to America, he said :—

We in England have learned from America one great lesson—the lesson of universal education. Ten years ago we had no national education in England. All our people were dependent upon voluntary efforts, philanthropic education; and it was simply hap-hazard whether a boy or girl, even in the upper classes of society could have that education which his position required. During the last ten or twelve years a different state of things has been inaugurated. England sent the present Bishop of Manchester to ascertain precisely what you were doing here; and found that so vast was your system, so beneficent the influence arising from it, that many of our distinguished men at once devoted their efforts to advocating national education. A great impetus was thus given to the cause in England, and Parliament was influenced to pass one of the most beneficent acts that could possibly be passed for the welfare of any country. One particular feature in the act as then passed, was the law that required every boy and girl throughout the whole land to go to school. It was “compulsion” of the most rigorous kind. Not only was the child compelled to attend school, but every parent was to pay his part towards the school rates. The parents were inclined at first to say that this was adding insult to injury—not only compelling them to send their children to school against their will, but to pay for it in addition. This rigorous compulsory law lasted but a very short time. We found the influence of the school was being diminished. The statutes were, therefore, somewhat modified, and the matter left to the discretion and leniency of the School Boards. To-day, the people are ready to say that the system is the wisest and most effective that could possibly be devised. The parents are on our side, even the very lowest classes, and we have very little difficulty indeed, in a city of 400,000 or 500,000 inhabitants, in getting all the children into the public schools, day after day, throughout the year.

REPORT
OF THE
NECROLOGY COMMITTEE
OF THE
AMERICAN INSTITUTE OF INSTRUCTION,
FOR 1883.

As, with cordial greetings and glad hearts, we meet on this Fifty-Fourth Anniversary of the American Institute of Instruction, it seems highly appropriate that for a few minutes we turn our thoughts to the memory of those of our membership, who have been called from earthly scenes since our last meeting. Though the number of such is much smaller than we have had occasion to report on some previous anniversaries, if we consider the character and influence of those who have left us, we shall be constrained to admit that death has garnered a rich harvest, and taken from us men of rare worth and usefulness, whose lives have been largely devoted to the promotion of the great interests of education, which are so dear to us, and for whose advancement we have now assembled. While with submissive reverence we bow before Him who has taken what He gave; and while we mourn that we shall never again, on earth, behold the faces of our departed associates, let us ever cherish their memories, and gratefully remember that we have so long shared their sympathies and labors.

WILLIAM C. GOLDTHWAIT.

To those of our membership who attended our meetings a quarter of a century ago, the name of William C. Goldthwait will recall the memory of a man of more than ordinary ability and originality, a man deeply interested in the cause of education, and in warm sympathy with its friends.

Mr. Goldthwait was born in Longmeadow, Mass., on the 1st of May, 1816. His early years, like those of most farmers' boys, were mainly devoted to such farm work as usually falls upon boys in the country, with the exception of a few weeks in each year spent in the district school. He early gave evidence of possessing more than ordinary ability as a scholar, and at the suggestion of his pastor, he was induced to prepare for a collegiate course, and in due time he became a member of Amherst College. He was, however, obliged to abandon his studies on account of weakness of his eyes. Soon after leaving college, he taught school for a season at Richmond, Va., and Elizabeth, N. J., with good success. In 1844, he became associated with Rev. Hubbard Beebe, in the management of a popular academy in Westfield, Mass., and after a few years, on the retirement of Mr. Beebe, he became sole principal of the Academy, which he taught to great acceptance for eleven years. In alluding to his death, the Westfield paper said: "The pupils of the late William C. Goldthwait, formerly preceptor of Westfield Academy, are greatly pained at his death. A large number of men and women in this place;—some pillars of the town and church,—will always cherish his memory."

After several years of good work at Westfield, he returned to the old homestead at Longmeadow, and established a family school for boys, and here for many years he did some of his best work. In 1868, after fourteen years of faithful work, he retired from teaching, and until the time of his death he was mostly confined to his home by gradually declining health. Of him, his pastor, Rev. Mr. Harding, wrote: "He was a thoroughly original character of marked peculiarities, both in person and address, an alert and stimulating teacher; as a writer and speaker, bright, witty, quaint, and striking, both in thought and expression; a lover of nature and poetry, singularly fond of good books and good people, extending his researches beyond his vocation into various sciences, and particularly that of agriculture. Of a fine mental fibre, warm and true in his affections, and with the native instincts of a gentleman, he won many sincere friends, and was widely and highly respected by a large community. Beyond all other qualities he was marked, and especially in his later and ripening years, by a devout and tender piety, embodying in all his daily walks and conversation the hymn, 'I love thy church, O God.'"

"He liveth long, who liveth well."

As a member of the Massachusetts Teachers' Association, his lectures and talks were always listened to with delight, and as one of the early editors of the *Massachusetts Teacher*, his writings were always read with great interest. He received the honorary degree of A. M., from Williams College. Mr. Goldthwait died November 18th, 1882, at the age of 66 years. He became a member of the Institute in 1849 and the same year gave an excellent lecture on "Practical Education."

SAMUEL S. GREENE, LL.D.

It is seldom that we are called to chronicle the decease of one whose talents and energies have been so entirely and so successfully devoted to educational work as were those of the late Prof. Samuel Stillman Greene, who died at Providence, R. I., on the 24th of January, 1883. In each of the various and important positions he was called to occupy, he discharged incumbent duties with rare ability, skill, and success; always doing good work, always commanding the respect and confidence of all associated with him in his labors, as well as of all for whose intellectual and moral elevation he devoted his talents and energies.

Samuel Stillman Greene was born in Belchertown, Mass., on the 3d of May, 1810. His father was a very intelligent, and hard-working farmer, who for several successive winters taught the district school with great success, and to very great acceptance. The subject of our notice, like most farmers' boys, gave most of his early years to farm work, with the exception of the few weeks, yearly, in the common district schools.

In 1828, when 18 years of age, he enjoyed the advantages of a higher school taught by his brother, Rev. John Greene, and in the winter following, he taught his first school in his native town, at ten dollars per month, and "boarding round." He at once manifested a remarkable love and ability for teaching; probably inheriting the same from his father. He finished his preparation for college in the Academy at Leicester, Mass., in the winters of 1830-31; he taught in that town to very good acceptance, proving an earnest, competent, and conscientious teacher. In the autumn of 1833, at the age of 23, he entered Brown University, then, and for many subsequent years, under the presidency of the late Dr. Wayland. Here he gained and held a high rank in his class, and

in 1837, graduated with its highest honors. Graduates of the character and standing of Mr. Greene are always in demand, and he was at once engaged as assistant teacher in the Baptist Academy at Worcester, Mass., of which he soon became principal. After three years of very successful teaching here, he was elected to the superintendency of the public schools of Springfield, Mass., being the first office of the kind in Massachusetts. He held this position for a year or two, when he became a teacher in the English High School, of Boston, and after about three years of good work here, he was promoted to the mastership of the Phillips Grammar School in the same city. This position he filled with rare ability for five years, when he became State Agent of the Massachusetts Board of Education; being the first agent ever employed by the Board. He held this office but a brief period, when he was elected to the superintendency of the schools of Providence, R. I., where, for a few years he did excellent work.

In 1851, he was appointed Professor of Didactics in Brown University, a position for which he was admirably qualified. He at once commenced a course of lectures to teachers, which, in 1853, resulted in the establishment of the Rhode Island Normal School. Until 1855, Prof. Greene held the office of superintendent of the city schools, in connection with his college duties; but in that year he resigned charge of the schools, that he might accept the chair of mathematics and civil engineering in the University. From this time onward till the very day of his death, he labored with marked interest and zeal in the discharge of the duties of his professorship, gaining, and richly meriting, a high rank as an accomplished and efficient teacher. Of him it may be most truthfully said, "he died in the harness," for while on his way to meet his class, he was suddenly attacked by the disease which in a few hours resulted in death.

For nearly twenty years, Prof. Greene was an active and efficient member of the School Board of the city of Providence, rendering excellent service for the educational interests of the city. In all matters pertaining to education, he was to be relied upon as a well-balanced and judicious man for council and advice. He was thoroughly posted, sound and practical. As evidence of the high estimation in which he was held by his fellow-laborers in the educational field, it may be said that at different periods he was made President of the Rhode Island Institute of Instruction, the Amer-

ican Institute of Instruction, and the National Teachers' Association. As proof of his ability in his college labors, and of the estimation in which he was held, the highest honor of the University was bestowed upon him in 1870, the degree of LL.D.

Prof. Greene will, probably, be most extensively known and remembered as the author of several text-books on language and grammar, all of which have met with an extensive sale, and commanded the approval of many of the best teachers throughout the country.

At the mature age of 73 years, January 24, 1883, Prof. Greene's well-rounded and useful life on earth suddenly ended, and, we doubt not, he at once heard the great Master's voice saying, "Well done, good and faithful servant, enter thou into the joy of thy Lord."

Prof. Greene became a member, and also an officer of this association in 1844. As evidence that we are rapidly "passing away," it may be said that of the thirty then composing the Board of President and Vice Presidents, all but three have passed from earth. As we are thus forcibly reminded of our mortality, let us not forget that

"The lightest wave of influence, set in motion,
Extends and widens to the eternal shore."

GEORGE W. GREENE, LL.D.

On the 2d of February, of the current year, just nine days after the decease of Prof. S. S. Greene, previously reported, George W. Greene, LL.D., died at his home in East Greenwich, R. I. As remarkable coincidences, we may say that both had been students, and filled professorships in Brown University; both were recipients of the highest collegiate degrees; both attained eminence as writers and authors; both died of the same disease, and at the same hour of the day, and only nine days apart; and that there was only a year and twenty-eight days difference in their ages; and all the more remarkable when we add that there was no family relationship between the two.

George Washington Greene was born at East Greenwich, R. I., on the 8th of May, 1811. His parents were of highly honorable descent, his father being son of Gen. Nathaniel Greene, an officer

in the army of the Revolution, who was prominent for his brave achievements and brilliant successes. His mother was a lineal descendant of Roger Williams; her father, Samuel Ward, having been Governor of Rhode Island.

At the early age of 14, Mr. Greene became a member of Brown University, but early in his junior year, ill health obliged him to relinquish his studies, and in 1827, when only 16 years of age, by the advice of his physician, he went to Europe with the hope of regaining his health. He remained abroad most of the time for nearly twenty years, occasionally returning for brief visits to friends in this country. From 1835 till 1843, he was United States Consul at Rome, and while there gave special attention to Italian literature, in which he became quite proficient.

Soon after the termination of his consulship, in 1843, he returned to this country, and not long after, he was elected to the professorship of modern languages in Brown University, a position for which his long residence abroad had well fitted him. He entered upon the duties of his professorship in 1848, and discharged the same with credit, till 1852.

On retiring from his professorship, he removed to New York, where, for nearly fifteen years, he devoted himself to literary pursuits, after which he returned to the home of his youth, where he spent his remaining years, and where he suddenly died of apoplexy, at the age of 72 years. Prof. Greene was a writer and author of more than ordinary merit. His sketch of the life of his grandfather, Gen. Greene, written originally for Sparks' American Biographical Series in 1846, was subsequently expanded to three volumes and published in the city of New York, about 1870.

Prof. Greene was the author of "Primary Lessons in French," "Historical Studies, principally on Italian subjects;" "History and Geography of the Middle Ages," etc. In 1863, he delivered a course of lectures before the Lowell Institute in Boston, and also before Cooper Institute in New York, in the ensuing winter. These lectures were subsequently revised and published under the title of "Historical View of the American Revolution." These and other works, together with numerous and interesting magazine articles, give abundant proof that Prof. Greene was a man of rare scholarship, and possessed of a marvellous amount of perseverance and application in literary pursuits.

Of him, as of Prof. Samuel S. Greene, it may be said that his

long life was fully occupied in literary labors, all of which were of high order, and designed for the good of his day and generation. He became a member of this association in 1833, in the early days of its existence. He died full of years, and full of honors.

"The heights by great men gained and kept,
Were not attained by sudden flight;
But they, while their companions slept,
Were toiling upwards in the light."

PAUL A. CHADBOURNE, D.D., LL.D.

On the 23d of February of the present year, Paul A. Chadbourne, while on a visit to a friend in New York, died after a brief illness. Though he had not yet attained "three-score years," yet if "that life is long, which answers life's great end," it may safely be affirmed that he died full of years, and full of honors.

Pres. Chadbourne was born in North Berwick, Me., on the 21st of October, 1823; and in boyhood he worked hard, both on the farm, and in the carpenter's shop. As he early manifested a love for study, and more than average scholarship, he was sent to Phillips Academy, at Exeter, N. H., where he prepared for college. In 1844, then 21 years of age, he became a member of Williams College, from which he was graduated with highest honors in 1848. After a season of teaching at Freehold, N. J., he studied theology at East Windsor, Conn., after which he became tutor at Williams College, and subsequently took charge of an Academy at East Windsor Hill, which position he left to accept the professorship of chemistry and natural history at Williams College, and for seven years he filled a like professorship at Bowdoin College, equally dividing the time between the two colleges. For thirteen years he annually gave a course of lectures at Mount Holyoke Seminary. For three years he filled a professorship in Berkshire Medical College; having in earlier years given attention to the study of medicine. Subsequently he was for three years President of Madison University, in Wisconsin; which also included the State Agricultural College. For nine years, from 1872, till 1881, he was President of Williams College, a position he resigned, and in 1882, accepted the Presidency of the State Agricultural College, at Amherst, Mass., a position he filled with marked ability for one year, when his earthly labors ended. From what we have

stated, it will be readily inferred that Pres. Chadbourne was a man of remarkable ability and versatility of talent, and of a clear and comprehensive mind, which made him equal to the duties of any position. In the words of Rev. Dr. Hopkins, Pres. Chadbourne was "a man of remarkable ability, and intense activity." He became a member of the Institute in 1874 and died at the age of 60, after a life of extraordinary variety of scope, and usefulness, having well filled every position he had been called to occupy.

"He most lives
Who thinks most, feels the noblest, acts the best."

CHARLES NORTHEND, }
MERRICK LYON, } *Committee.*

PRIZE ESSAY;
AWARD OF AMERICAN INSTITUTE OF INSTRUCTION.

APPLICATION

OF THE

PRINCIPLES OF PSYCHOLOGY

TO THE

WORK OF TEACHING.

BY

W. N. HAILMANN, A. M.,
AUTHOR OF "KINDERGARTEN CULTURE," "HISTORY OF PEDAGOGY," ETC.

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PREFACE.

AT no previous time in the history of education in this country have teachers and School Superintendents manifested a more earnest desire to understand the philosophy of their work. Everything written upon the subject is read with interest. The American Institute of Instruction, through the Trustees of the Bicknell Fund, awarded the entire income of that Fund for the year 1883, to the best essay upon the Application of the Principles of Psychology to the work of Teaching. The committee of award consisted of J. W. Dickinson, Mrs. E. N. L. Walton, and George H. Martin. Within the limit of time allowed for presenting the essays, thirty were received. Among these were others of considerable merit; but to the essay by Prof. Hailmann, the committee made the award with entire unanimity.

By the conditions of the award, the essay receiving the prize becomes the exclusive property of the Institute. Electrotypes have been made, and an edition of this essay is published, to facilitate a study which must be more and more pursued, as progress is made in the art of teaching. The abstract read at the Annual Meeting of the Institute, was received with much favor, and it is believed the publication at the present time will meet a general demand.

Boston, May, 1884.

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THE APPLICATION OF THE PRINCIPLES OF PSYCHOLOGY TO THE WORK OF TEACHING.

EDUCATION comprises all intentional and systematic influences upon the development of the human being, particularly of the young human being or child.

This definition at once separates educational factors into two groups, — the conscious and the unconscious factors. Among the former, the principal ones are the parents or their substitutes, the teacher, and the child himself. Among the unconscious factors, the leading ones are the nature of the child (i. e., the inner growth of its powers), surroundings, and society, as long as it has no direct interest in the child.

We are here concerned only with the teacher. Yet the principles involved apply with equal force to all educational work. Hence we take no cognizance of the narrower aim in the statement of these principles.

The unconscious factors can exert an educational influence, only if one or several of the conscious factors aid them. The richest surroundings produce no effect upon the child, if he takes no interest in them; hence it is one of the chief tasks of the educator to arouse and direct this interest, and to render it consciously self-educative. The inner growth of the child's powers, his nature, may go astray or stop progress wholly, if conscious educators do not

guide and foster it, or if the child himself, after reaching a certain maturity, does not consciously keep it in the right direction. Natural development, surroundings, and all other unconscious factors alone, can no more educate than the hammer alone can forge, or the unguided stream drive the mill wheel. They need, in order to become efficient, the directing hand of the master.

This view of education imposes upon educators the necessity of devising a fixed plan for their work in aims and means. The whole work should tend in every part towards distinct ideals; and the path followed should be carefully adapted to these ideals, and to the nature and destiny of the child.

The choice of the educational ideal is of primary importance, since upon it depends the value of the education to the child and to society. Of course, the educators have no right to choose ideals that deprive the human being of his liberty, render him hostile to society, or give him only a transient and relative value. The ideals they have a right to choose, should give the human being freedom in the exercise of all his powers, with constant reference to the welfare of society and the advancement of the race, and should impart to him a lasting and absolute value. They should lead his taste to the Beautiful, his insight to Truth, his conduct to the Good.

Only wisdom whose essence is the striving for truth, and virtue whose essence is the striving for goodness, can give man a lasting and absolute value,—a value which no vicissitudes of life can diminish, which will enable him to scatter love and to gather peace. All that fails to lead to these, all that hinders development towards these, all that refuses to heed the requirements of the Beautiful, the True, and the Good, these highest criteria of feeling,

thought and conduct, is false education, and cannot be considered here.

In his nature, the human being appears as a growing organism. He develops from within outward, according to certain organic laws which apply with equal force to all the phases of his being. He appears as a distinct unity in conscious opposition to all else; a self-knowing within, placed over against an all-embracing without; a growing microcosm, placed within a sustaining macrocosm; a node, where infinity outward and infinity inward enter into consciousness.

For purposes of study, it has been customary to subdivide his nature in various ways; but it should be remembered that these subdivisions exist only in and for science, not in man. Thus the phases of his being, which lie between the within and the without, and through which his self is impressed by the external or impresses the latter, constitute his *physical* nature. His *psychical* nature enables him to comprehend the finite actualities in time and space; and his *spiritual* nature reveals to him the infinite potentialities, which are the essence of all being. Thus, too, the successive conditions of knowing, feeling, and willing are but the three successive stages of one and the same mental process of complete cerebration, in which the conscious personality sees, becomes interested, and reacts.

The consideration of man's nature reveals to us also his destiny. This appears to us as the conscious acknowledgment, in all the phases of life, of the unity which is in him and which, at the same time, makes him one with all, — a self-conscious utterance of the Infinite. It appears as the establishment in consciousness of full accord, between the inner and the outer; between the microcosm and the

macrocosm ; between seeing, feeling, and doing ; between experience and practice.

Practically, this implies mastership, or control. Objectively, it means control of surroundings, of the world ; subjectively, it means obedience to the laws of being, or control of self. The conditions of control are knowledge of the object to be mastered, knowledge of one's own powers, and skill in applying or wielding the latter, in establishing the needed harmony between self and the object in question. Knowledge comes from observation and experience, skill comes from practice. It may, therefore, be said that, proximately, the destiny of man is to establish harmony between observation and experience on the one hand, and practice on the other.

When we apply this to individual human beings it seems quite trivial ; but not so when applied to man in his relations to mankind. Here we find him profiting by the garnered knowledge of past ages, and adding to this the increase gained by him ; here we see him appropriating the observation and experience of his generation, and scattering broadcast among his own contemporaries the yield of his own life ; here he submits in his practice to the judgment of men long dead, or lays down rules for the practice of his children's children ; here he co-ordinates his will to that of thousands, for the sake of a mastership which needs the combined energy of many, or thousands become willing tools of his determination in the service of a common advantage ; here we find man in relationships that free him from the fetters of time and space, and open to him the realms of the Infinite.

Psychology is concerned with the study of the phenomena of consciousness. The growth and development of

consciousness, the natural history of ideas, emotions, and volitions, of knowing, feeling, and willing, — constitute its province. From the time when an influence from without has produced a change within, directly — though ever so remotely — connected with the subsequent arousal of consciousness, this change becomes an object of interest to psychology, and remains so, as long as it continues to exert any influence through consciousness upon the conduct.

Strictly speaking, psychology has no interest in those influences from without as such, nor with the actions themselves which in their aggregate constitute conduct, nor indeed, with the physical concomitants of cerebration in the body of man. Nevertheless the entire nervous apparatus, and particularly that of the senses, is so intimately connected with the origin and evolution of the facts of consciousness; and the reflex influence of action upon ideas, feelings, and the will, is so great that their consideration is of the utmost importance in applying psychological principles to education.

In its general features, the course of psychological development is simple enough. Through the agency of the senses, outer influences cause disturbances in inner equilibrium, or *sense-impressions*. These in due time become sufficiently numerous or intense to arouse *attention*, and consciousness is born. So far the process has been mainly, if not exclusively, inward; but very soon a reaction sets in by which the attention is directed outward, towards the outer concomitants of the inner disturbances. These outer concomitants are found, the mind perceives their unity with corresponding inner forms of consciousness: it has gained *perceptions*.

The inner disturbances of equilibrium, underlying these formations, are more or less permanent in the *memory*.

They may be brought back to consciousness in various ways, involuntarily by closely related disturbances from without or within, or voluntarily for purposes of thought or feeling, when the mind *remembers* or *recollects*, *fancies* or *imagines*.

The frequent re-arousing of perceptions, containing similar and dissimilar features, gives to the similar or common features in due time a certain prominence over other features; these assume a *quasi*-independent existence, approaching objectivity, in the outer regions of consciousness. To these *conceptions* the mind constantly refers its perceptions, and they become the inner concomitants of language.

Subsequently this growing consciousness learns to differentiate itself from the external more and more clearly, to recognize itself as *subject*, distinct from all else, as *object*. Its concepts grow more and more distinct, as well as more comprehensive; it begins to understand relations in the actual more and more clearly: it has grown into an *intellect*.

At last the intellect learns to look upon itself objectively, as it were; learns to see essential relations between the inner and the outer, as well as among the inner and outer respectively; discovers the intimate relationship existing between the inner microcosm whose soul is time, and the outer macrocosm whose soul is space: it obtains an *insight* into relations that partake of the Infinite, it has acquired the power of *reason*, and has risen to the dignity of *spirit*.

Thus the mind rises successively from the sensual, through the intellectual, to the spiritual phase on the side of thought.

A similar process accompanies this on the side of feeling.

In simple *sensation*, the common root of insight and emotion, the sense impression is still so closely blended with the corresponding feeling that it is quite difficult to distinguish the two. Hence the same term *sensation*, designates almost indiscriminately either or both.

As soon, however, as the mind has discovered the unity between the inner and the outer in perception, it has also learned to apprehend beneath the knowledge, and deeper within itself, as even more fully its own, the attendant feeling of pleasure or pain. This apprehension lives in consciousness as *desire* to hold or relinquish the corresponding form of thought.

Consciousness becomes more and more involved in this desire, until the mind learns to connect it more and more clearly with certain external conditions and their relation to inner welfare. It then begins to take a lively and more or less permanent *interest* in the study of these conditions, an interest which is the mainspring of intellectual activity.

When, at last, the intellect has become interested in itself as an object of thought, the feelings aroused by the discovery of self in its inward and outward relations to the Infinite, the consonances and dissonances of being thrill the mind in its innermost depths, in *emotions* that fill it to the momentary exclusion of all else, and infuse it with an intense yearning for fixing the harmonies or resolving the disharmonies in suitable action.

Of these yearnings there is born, in due time, a persistent energy of action, which directs man towards certain objects or purposes. It takes thought into its service, as counselor or guide; assumes control of man; and, as *will*, is crowned the sovereign on whose wisdom depends the value of life, inwardly and outwardly.

These are some of the landmarks set up by science in

her efforts to grasp mental growth. It should be remembered, however, and more particularly when we would apply these matters in education, that the transition from one form to another is so gradual and so continuous that it is impossible to find any form stopping, as it were, at the landmarks of science. The forms are always on the move, approaching the point of observation or passing beyond it.

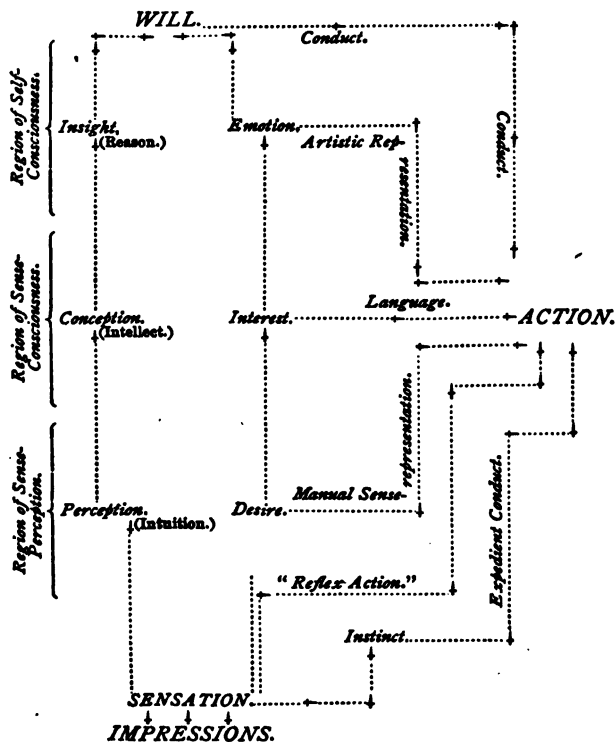
Besides, the infinite mobility of mental being involves such a complexity of co-existent mental forms, that the mental condition at any given moment is the resultant of an infinite variety of mental activities in all possible stages of development.

Similar difficulties meet us when we approach the subject on the side of *action*, of the outward reactions or utterances of mental states in the various forms of moving, voicing, and doing. As soon as sense-impressions begin to be formed, the mind reacts in a variety of such utterances, more or less to the point. Similarly, perceptions and desires, conceptions and interests, insight and emotion react outwardly in a manner so direct and to the point, that it is difficult to distinguish these actions, with reference to their sources, not only from each other, but even from those of the will.

In fact, all these actions and utterances are as complex in their sources as the mind is in its conditions of consciousness. Hence, practically, the first utterances of newborn consciousness have somewhat of the will in them; while, on the other hand, the actions of the maturest will are more or less influenced by lower forms of thought and feeling.

However, some scheme like the one indicated above is indispensable for systematic educational work. For more convenient survey, therefore, the chief features of that

scheme are presented below in condensed form, roughly tabulated.



The only additional explanation that is needed concerns the place of the *instinct*. This has been purposely placed at one side of the main table, as a form of reaction in the feelings, attending sensation, but playing a vanishingly subordinate part in the development of the human will, which

is the chief concern of education. Instinct appears as a vigorous offshoot of inner reaction with much native energy, sufficient in the lower forms of life to rise to a wonderfully high degree of perfection in securing expedience of action.

In the application of these principles to education, it is further necessary to take into account the reflex influence which in any given psychological process runs back from action to its source. Action, in satisfying a desire, in gratifying an interest, in expressing an emotion, by a reflex influence strengthens, purifies, idealizes these forms of feeling, and through them their corresponding forms in thought. Hence, action is a most powerful instrument in the hands of the educator for quickening all forms of thought-growth from perception to insight.

Through action, the internal becomes external; the inner assumes an outer existence in the terms of the outer. Thus an opportunity is afforded for testing the correctness of the inner conceptions, with reference to their outer concomitants, by *quasi*-direct comparison. The contrasts between the original outer concomitant and the outer reproduction of the conception appear as inaccuracies, deficiencies, exaggerations, and other faults that call for correction. Thus action pushes conception steadily and surely nearer to objective truth.

It is for a similar reason that language plays so important a part in mental growth. It is true, words are but symbols of the inner thought-forms, incapable of the objective reality of plastic or graphic representation. They merely arouse in the mind of the hearer the corresponding thought-form in terms of his own subjective thought. Yet they are capable of expressing relations of being with almost specific precision and clearness. Hence, language

is the chief instrument of the mind in its analyses and syntheses of observation or invention, of fancy or imagination.

If *plastic* and *graphic* sense-representations are of the utmost value in establishing a substratum of reliable perceptions, *language* is indispensable in the operations of the intellect, while the needs of the creative spirit are supplied by *art*. In their essence, however, all sense-representation, language, and art are but variations of action, and owe their educational value to the reflex influence of action upon mental development.

In the case of the will, action appears a *conduct*, which as *practice*, exerts a powerful reflex influence in fixing the will into *habit*, and establishing the *character*.

The primary conditions under which psychological development takes place are, then, the following: First, an active external, capable of making impressions; second, an active internal, capable of actively receiving these impressions, of spontaneously placing itself in consciousness, opposite all else, and of controlling the external for inner needs. And, primarily, the business of education is to adjust surroundings with reference to these inner needs, and to supply ample opportunity for suitable activity on the part of the pupil.

In practical work, this simple business of education is beset with untold difficulties, arising from inadequacies of actual condition and development on the part of teacher and taught, as well as from perversions and interferences, due to hosts of unforeseen and uncontrollable influences. There is need for much guarding and correcting, bidding and forbidding, preventing and compelling; yet the aims of all these labors look towards the adjustment of surroundings or the supply of opportunities for activity.

The processes of psychological development follow, in their essential features, the general laws of organic development, manifested also on the physical side of being. There is here, too, a more or less active apprehension and taking-in of material for growth from without, a separation as in digestion, of the serviceable from the unserviceable, an absorption of the serviceable into the mobile contents of the circulatory system of the memory, an assimilation from this in the various higher forms of the mental organism, and, ultimately, full participation of the assimilated portions in the conscious spontaneity of the mind. There are, too, processes of substitution of new thought-material for old, processes of waste, of wear and tear, of death and decay, processes by which unsuitable, effete, injurious material is expelled, and many similiar analogies that remind us of the unity of law presiding over the diversity of phase even in this most complex of facts, the human being.

These laws of development, however, are laws of organic being, and have no bearing upon the fundamental character of the various phases as such. The psychological cannot become physiological, nor the physical spiritual, though the manifestations of these phases naturally correspond with the development of the being of which they are phases.

Thus physical development means more compact, stronger, more active muscles, and a better adaptation of physical life to material conditions. Mental development means more vigorous, more intense, more vivid mind-power, and a nearer approach to objective truth in subjective convictions; moral development means purer feelings, better regulated appetites, stronger will, firmer character, higher aims in life, a keener sense of responsibility, and a deeper appreciation of the relationship that binds all to all.

Organic development, and, therefore, psychological development requires time, *i. e.*, it is, relatively speaking, slow; it is gradual, continuous, self-active, — psychological self-activity implying spontaneity of purpose and freedom of action.

It seems unnecessary for the purpose of this essay to carry the analysis any farther. The relative slowness, gradualness, continuity, and self-activity of psychological development, its primary conditions, and its course, furnish satisfactory criteria for methods, courses of study, appliances, and other matters that enter into the details of the work of teaching.

The proximate end of teaching is the communication of knowledge. Training, or the systematic guidance of conduct, is not teaching, but may be used for purposes of teaching, as also teaching may be taken into the service of training. Together they comprise the chief activities of the educator in his direct intercourse with the pupil. Their ultimate end is the same, and lies in education; but teaching approaches it on the side of knowledge, and is primarily concerned with impressions, while training approaches it on the side of conduct, and is primarily concerned with actions. Without training, knowledge is barren; without teaching, conduct is blind. Teaching gives freedom to conduct; training gives mastership to knowledge. Teaching leads in, training leads out.

In discussing the application of psychological principles to the work of teaching, it will, then, be necessary to consider training and leading-out processes in so far as they influence by reaction the leading-in processes, the accumulation of knowledge, both in character and extent.

Another limitation of the subject is found in the fact that

the teaching here contemplated is not teaching in its widest sense, but comprises in the life of the pupil only that portion of teaching which comes within the control of professional teachers.

In its widest sense, teaching is almost co-extensive with education, which in the natural life of man stretches from the cradle to the grave. Shortly after the birth of the child and for a period of several years, the parents and other home-folks busy themselves in purposely increasing the child's knowledge and liberating its conduct. At the age of five, six, or seven the child enters school, where it passes a few hours during certain days of the week, chiefly for purposes of instruction. Yet, even during this period, which rarely extends beyond the eighteenth year of age, the school does not control all the teaching. The home continues its work; and certain groups of persons (companions, churches, associations) become interested in the child, and add their teaching efforts, helping or hindering the work of the school according to the character of their purposes. After this period, the child, or young human being, is left mainly to himself to choose more or less consciously and freely, among the numberless sources of knowledge, those that may aid him more or less effectually in earnest efforts of self-education, or that gratify a more or less egotistical pursuit of pleasure.

The consideration of other limitations that may present themselves in the individuality of child or teacher, in heredity, in surroundings, and other equally variable or unstable factors in life, must be left to a more detailed discussion than the limits of this essay will admit.

These limitations, however, do not affect the value of the psychological principles indicated in the first part of this essay as criteria of the work of professional teaching

in all its phases. In matter and method, in the presentation and arrangement of subjects, it should constantly consider the relative slowness, the gradualness and continuity of psychological development; it should respect and stimulate self-activity; it should regard primary conditions, controlling the character of surroundings with reference to inner needs and supplying at every step ample opportunity for suitable activity. It should keep in view the course of psychological development, the fact that all higher forms of knowledge rest upon the lower; that perception presupposes sensations, and that these imply impressions; that conception feeds upon perceptions, and that reason is built upon the intellect; that impressions can reach insight only through all the intermediate phases, and that whatever blossoms in reason or bears fruit in the will, has its roots far down in the teeming soil of sense-perception. It should keep in view the fact that all that enters consciousness is there irretrievably, that it must travel upward, carrying with it the strength or weakness, the light or darkness of which it is born. It should keep in view the fact that all forms of knowledge are indissolubly bound to corresponding forms of feeling — feelings of attraction or repulsion, of pleasure or pain, which determine in a great measure to what extent the corresponding thought-forms shall participate in the conscious spontaneity of the mind. Lastly, it should keep in view the indispensable need of action for healthy and vigorous thought-growth. It is through action that knowledge becomes aware of its power and value, that it learns to love and appreciate itself, that it learns to know itself, as it were. Action furnishes the rounds of the ladder by which knowledge under the mighty incentives of feeling climbs to ever greater heights, out of darkness into light. It is action that makes the knowledge

of one the knowledge of all, that makes progress a distinguishing attribute of the race, raising generation after generation upon the shoulders of its predecessors, sounding the cheering cry of *excelsior* ! even for mankind, and making it through countless ages as one man in the conquest of the Infinite.

It is not difficult to distinguish in the psychological development of the individual human being successive periods during which the successive phases of thought and feeling manifest a decided predominance in the order of their development. There is in earliest infancy a *period of sensation*, during which consciousness has not yet learned to look outward for factors in its dawn of feeling and knowing, a period characterized by a peculiar dreamy inward-looking expression of the eyes, and by an equally characteristic vagueness and indirectness of the weak muscular movements attending the sensations.

This is soon followed, still in infancy but extending far into childhood, by a *period of perception*, when the mind turns outward, begins to recognize its central position, its sovereign power, — a period characterized by extraordinary activity inward and outward. The first clear perception bursts upon the mind like a sun after the short dawn of the previous period, kindling life in all directions. Whithersoever the mind turns, it sees the life without; and its desires, growing steadily in number and urgency, keep the little hands and arms and feet constantly on the move in efforts to bring this outer life into subjection.

For education as a whole, this is the most important period of life on account of its fundamental character, and on account of its persistence. During this period, which extends its sway far into the growth of intellect, the mind

gathers its materials from which its proudest conceptions, its intensest thoughts and feelings are derived ; during this period, it sets the rounds of the ladder that is to lead up to whatever height it may climb.

The responsibility of adjusting the child's surroundings, of providing opportunities and material for its activity, of guarding, guiding and helping the child during this period, rests chiefly on the parents and the kindergartner. The materials and methods of the kindergarten, as proposed by Froebel, are well adapted to the individual and social wants of the child at this period. The material is so arranged that with its help the child, even with very limited skill and power of control, can reproduce in outward form the essentials of its ideas of things, and thus, through repeated reflected perceptions of its own thoughts, more surely arrive at clear genuine conceptions. The method is such that the child's spontaneity is always helped, and held without compulsion in the direction of the Beautiful, the True, and the Good. Without appreciable friction, the nascent selfishness is deflected into a deep concern in a common welfare, the love of power steers clear of the shoals of despotism towards an open sea of rational freedom, all traces of vandalism vanish before the pleasures of a healthy exercise of constructiveness, the instinct of play is taught to serve distinct purposes and to become a spirit of work.

The kindergarten, if conducted in accordance with Froebel's suggestions, liberates the intellect, and thus hastens the transition of the child to the third period of psychological development, *the period of conception*, without danger to the solidity, compactness, and harmony of mental growth. During this period, with which this essay is more particularly concerned, the mind turns towards itself as an object.

It compares its notions of things with the things themselves, thus steadily correcting the former, rendering them by slow degrees more and more accurate, more and more "true." It compares its notions of things with each other, and, in accordance with certain differences and resemblances, arranges them in groups and classes to which all its subsequent mental gain is referred. In due time proximate groups are united on the basis of deeper similarities in remoter groups; and this process is continued on successively higher planes, until the mind learns to hold all in a few simple terms, such as space and time.

A deep and abiding interest rivets the mind to these activities. In its efforts to bring ideas nearer to objective truth, it patiently *observes* the external through long periods of time, continually strengthening or modifying previous notions in the light of new perceptions, with an honesty and conscientiousness that partake of highest virtue; for the purpose of determining the true sequence of cause and effect, it subjects the external in painstaking and laborious *experiment* to certain conditions, again and again.

Through such processes it gradually arrives in various *directions* at systematically connected criteria of knowledge, which it dignifies with the name of *Science*, whose mastery demands the closest application and not unfrequently kindles an interest capable of filling a life.

The fields of science furnish the soil that yields to genius, in all its forms and powers, however humble or exalted, the harvest of inventions and discoveries, of creations and revelations that lift him upward and teach him his origin and his destiny.

The greater portion of this period falls within the limits of the school, which is the chief concern of this essay. During this period, the mind rises consciously from the

concrete to the abstract, from the particular to the general, from the actual to the possible, from the outer to the inner, from experience to principle, from facts to laws, from complexity to simplicity, from the extensive to the intensive, from space to time; and the business of the teacher is to adjust surroundings, and to guide and guard the pupil with reference to these activities, so that in the period of insight, reason may not fail him, and the will may become duly liberated.

I propose to show by way of illustration, the application of the psychological principles heretofore enunciated in the following typical phases of the work of teaching: 1. A general outline of a "course of study" within the limits of Primary and Grammar Schools; 2. school organization, with reference to the distribution of teachers and pupils; 3. method of elementary reading and writing; 4. spirit of disciplinary regulations.

In framing a course of study for Primary and Grammar Schools it should be constantly borne in mind that the period involved corresponds chiefly to the earlier portion of the psychological period of conception. When the child enters school it is still gathering perceptions, though upon some things it has quite clear and comprehensive conceptions; and when it leaves the grammar school, its intellect should have grown into a fair supremacy, and the dawn of insight into the deeper relations of being should be full upon its mind. During the first years of school-life, the subjects of study should be of a character to facilitate the formation of perceptions and their transition into comprehensive conceptions; they should lie on the side of the concrete, the actual, the outer; they should deal with experiences, with facts, with space, with objects. They

should, then, gradually merge into forms that lie on the side of the abstract, the possible, the inner; that deal with principles, with laws, with time, steadily leading the child out of the complexity of things into the simplicity of thought.

Now, the school can afford neither the time nor the labor that would be required to follow the child,—explaining, guiding, and warning—through the maze of facts and phenomena as they occur in nature, and the confusion of practical experiences of an undisciplined life. It must invent more or less artificial surroundings, a world of objects and events more or less idealized, more or less systematized, where the child may attain a fair understanding of the essentials of life with as little friction as possible. This ideal world must be the child's and within the child's control. The child must not, as in object-lessons, be placed at respectful distances from certain sample-pieces thereof, and taught to repeat certain phrases concerning these; but it must have objects and material placed within its hands to be fully its own for purposes of observation, experiment, analysis, or construction. Again, these objects placed within the child's reach, and with the help of which it is to attain the intellectual control of a world, should present their essential characteristics in unmistakable distinctness, in striking and unavoidable contrasts; and they should be such that the child can handle them not only without injury to itself and these objects, but with profit to both.

Abundant hints in this direction have been given by Froebel in the construction of his gifts, each of which represents in a form readily controlled some simple essential fact or relation, whose full apprehension throws a new flood of light upon the child's world. Playing with the simple

blocks, tablets, sticks, lentil seeds or dots, and working with sheets of paper, paper strips, the weaving-sheet, paste-board, the embroidery-needle, the drawing-slate, sand or clay, the child obtains successively clear notions and full control of various laws of position and shape, divisibility and number, size and gravitation, symmetry and proportionality of parts, and other relations and qualities which constitute the essentials of things.

With the help of this simple material, the child is enabled to form concrete representations of the essentials of things, in form, number, relations of position, etc., immeasurably nearer the conceptions of the things involved than are the things themselves; thus the formation of clear conceptions and, consequently, the liberation of language and of the intellect, are hastened without detriment to the solidity and compactness of mental growth.

The essentials of the outer world that interest man most nearly in his efforts to obtain intellectual control of his surroundings are centered in *space*, which in its limits involves *form*, *position*, *size*, *direction*, and *number*. Of these, number and size have a special interest, inasmuch as they constitute the chief bridges in the transition of the mind from outer space to inner time. To these may be added *color* as an important element, depending on certain relations of material surfaces to light. Lying nearer the emotional side of sensation, it has much power to arouse interest in related elements of space, hence its educational value is very great. The school will, then, find the first subjects for instruction with reference to the pupil's individual development, in the provinces of *Geometry*, *Drawing*, *Coloring*, and *Arithmetic*.

Almost simultaneously, however, the phenomena of motion and life to which the changes of position, direction,

size, form and number among surrounding objects are referred, and which intensely affect the child's comfort and welfare, point to studies connected with the provinces of *Physics, Chemistry, Natural History, Geography, and Uranography.*

Long before the child's entrance in school, too, the helpful presence of others aroused in its heart feelings of gratitude, of affection, and good will. These may or may not have been brought more clearly to the child's consciousness, and more fully within its control in the social games and group-work of the kindergarten. Howsoever this may be, the school should afford constant opportunity for social enterprises, involving common interests, common purposes, and common efforts, leading to an interest in the occupations of men, and the relationships among men. This leads to studies connected with *Sociology* and *History*, through which man connects himself consciously with the Past.

In all that relates to motion and life and, consequently, to the social phases of being, *sound* — lying also nearer the emotional side of sensation — plays a part similar to that of color in the realms of space. Connected with rhythm in the harmonious combinations and melodious successions of *music*, — it has wonderful power in freeing the mind from the material, and leading it to the spiritual, and is, therefore, of incalculable value in lifting man to the highest planes of mental life.

The chief medium of the work of teaching is *language*. At the moment when the child is awakened to self-consciousness, language appears as the chief outward reaction of growing self-consciousness in the intercourse with others. Language binds man to man, makes the Past an ingredient of the Present, and holds this fast for a Future. In the development of the intellect and of reason, it is

the medium of thought, the indispensable condition of their growth. Hence language, with all that pertains to it, will furnish subjects of instruction during the entire school-life.

Among the many considerations of method which it would be necessary to discuss in an exhaustive treatise on the subject involved, before deciding upon a "course of study," I refer here only to two of the most important.

The first of these is the necessity of a concentric arrangement of the subjects of study. This demands that, at each successive stage, the subject come to the child as a whole, that all the roots of the knowledge and skill involved be represented within the limits of the child's capacity. This, *the child's capacity*, and not the possibilities of the subject, furnishes the criteria for decision. From itself as a center, the mind penetrates in successive efforts, in circles or spheres constantly widening in all directions to ever greater depths of insight, to ever greater powers of control.

Another equally important consideration is the constant need of opportunities for adequate, all-sided expression on the part of the pupil both in language and in manual activity. This keeps alive the mightiest incentive for advancement, the sensation of power, and prepares the pupil for the business of life, which means expression in some form, of what is in him.

For the sake of showing the practical bearings of these considerations in unmistakable distinctness, I present below, without further comment, from a course framed in accordance with these requirements, the outline of a first circle or sphere. It comprises the first two years of school-life in a system of graded schools, the child entering at the average age of six years.

FIRST CIRCLE. (Two years.)

FIRST GROUP OF SUBJECTS: *Form, Drawing, Coloring.*

1. *Form*: Recognition and naming of the cube, cylinder, sphere, pyramid, and cone; of the square, lozenge, triangle, hexagon, octagon, pentagon, the circle, semicircle, quadrant, and oval; diagonal, diameter, radius, center; straight, curved, wavy, and spiral lines; of parallel, diverging, oblique, and perpendicular, horizontal, vertical, and slanting directions; right, obtuse, and acute angles. — **Materials used**; clay for modeling, tablets, spiints, papers for folding and cutting, paper-strips, etc.

2. *Drawing*: Automatic exercises by dictation or otherwise, in simple, symmetrical arrangements, in networks, embodying squares, half-squares, equilateral-triangles, with circumscribed and inscribed circles, or arcs; language-drawing or conception-drawing (p. 25), in simple outline representations of things, involving only essentials; artistic drawing in symmetrical combinations involving squares and circles with their subdivisions, shading and hatching, leaves, flowers, fruits, birds, and butterflies. The slate, properly prepared paper, the folding-sheet, the sand-table, and clay-tablet yield suitable drawing surfaces. The use of the dividers is admissible, especially with the clay-tablet and the folding-sheet.

3. *Coloring*: Classifying beads, dots, colored worsteds by their colors; "rainbow-games" with these and the paint-brush or colored crayon; coloring squares, triangles, circles, etc., in symmetrical arrangements on white folding-sheet, ruled paper, or clay-tablet; coloring leaves, flowers, fruits, birds, and butterflies.

SECOND GROUP OF SUBJECTS: *Number and Size.*

1. *Number*: Counting "forward and backward" by one's, two's, three's, four's, and five's, addition, subtraction, mul-

tiplication, measuring, and division within the limits (in successive sub-circles), of 1 to 10, 1 to 20, 1 to 100, 1 to 1000; similar operations, at the same time, with fractions within the limits, in corresponding sub-circles, of halves to fifths, halves to tenths, halves to twentieths (excluding 11ths, 13ths, 17ths, 19ths), and halves to hundredths (excluding all difficult denominations); games of exchange, of buying and selling, involving at first only price, but subsequently also gain and loss; games of "giving" and "guessing." Material used: tablets, splints, paper-strips, beans, buttons, etc.

2. *Size.* (Measurements): measuring and estimating length, distances, areas in inches, feet, yards; liquid and dry measures of capacity; lifting and weighing, within reasonable limits; games of manufacturing and jobbing.

THIRD GROUP OF SUBJECTS: *Physical and Chemical Properties, Natural History, Geography and Uranography.*

1. *Physical and Chemical Properties*: Classifying substances by their weight, hardness, smoothness of surface, solubility, fusibility, combustibility, and similar properties. Suitable collections of substances may be placed in the children's hands, or made by them.

2. *Natural History*: Observation of plant-growth, classifying of leaves, flowers, fruits, roots, plants, and animals by certain prominent characteristics. Collection and description of plants; observation and description of animals.

3. *Geography and Uranography*: Names of days, months and seasons, observation of Sun's position at stated times, course of sun in different seasons; changes of moon; cardinal points of compass; counting rainy days and days of sunshine; localities of plants and animals; stories of remarkable plants and animals living in distant countries; sketches of school-room, the school, the home, the way to

school, certain prominent localities; bird's-eye views on sand-table.

FOURTH GROUP OF SUBJECTS: *Sociology and History.*

1. *Sociology*: Social games, dramatizations of the occupations of men; construction of railroads, canals, bridges, tunnels, etc., on the sand-tables; discussion and dramatization of home and school-relations.

2. *History*: Accounts of events in the child's life; anecdotes from the lives of children.

FIFTH GROUP OF SUBJECTS: *Language and Music.*

1. *Language*: Conversation (not catechizing) is at the very soul of all the exercises heretofore mentioned. In addition, there are special exercises in the reading and writing of simple sentences and words; in word-building from sound-elements found with or by the children; in contrasting and combining classes of words in accordance with a variety of criteria of form, sound, meaning, or construction; in labeling and taking notes in connection with other subjects of study; in the writing of short orders, accounts, letters and stories; in reading for pleasure or profit from books and periodicals within the scope of the child's powers.

2. *Music*: appears incidentally in the social games and dramatizations of the Fourth Group; but there should be special exercises in which the child is drilled in the recognition and production of sounds in pitch, relative duration, in melodious and harmonious arrangement. The inherent emotional qualities of music are brought to the child's consciousness with the help of marches led by thoughtful improvisations on a musical instrument.

A course similar to this, satisfies the child's intellectual wants in all directions; it is well rounded, as a whole and in all its parts; it never leaves the child's knowledge in a

fragmentary condition. The child can and does constantly make use of all it learns for the immediate purposes of its life, and its school is indeed a preparation for life. Every new circle does not so much complete the knowledge previously gained; but, starting again from the same center, the child, it extends this knowledge to wider fields and greater depths; and all the time, the development of tact and skill, of taste and foresight in the application keeps pace with the new acquisitions. Thus, in due time, science may be reached on the side of knowledge, and art on the side of skill.

In considering the distribution of teachers and pupils, it is to be taken for granted that the teachers are well fitted for their work in professional knowledge and skill, as well as in all the qualities of head and heart, needed for the work. The question then rests wholly with the individual and social wants of the child, and these point unmistakably to the desirability of grading. These wants will be best satisfied among those who belong to the same circle of development. Here the child will find the material best adapted to its requirements; in these surroundings it will feel the keenest interest, and find the readiest appreciation. Where it is feasible, even the children of sub-circles should be arranged in separate groups. By the union of contiguous circles the attention of the pupil and the energies of the teacher become scattered, and there is great loss of interest on the one hand, and of power and efficiency, on the other. This is quite apparent in some country district schools, where children of all grades are united. If these schools ever attain an alleged superiority, it is due chiefly to the fact that they do not hinder development, whereas badly conducted graded schools, built on fragmentary

courses of study, do positive harm by repressing, deflecting, or unsettling development in a variety of ways.

On the other hand, it is desirable that occasions be provided at more or less regular intervals, when the children of contiguous circles are brought together for exercises more or less festive in character. Here the younger are encouraged by the joy and help they can give to the older whom they esteem so highly; and the higher achievements of the latter of which they are witnesses, furnish wholesome and fertilizing incentives to effort, while the older pupils are taught to feel the joy of leadership and the responsibility of example.

In the transfers from one circle to another, the degree and character of mental development should furnish the chief criteria, the amount of knowledge and skill acquired being indeed significant, but of secondary importance. The practice of deciding wholly by the amount of positive knowledge acquired, is pernicious. A certain degree of intellectual maturity will be sure to reach in the various subjects of study a bearable equality with agreeable and helpful companions, under the leadership of a tactful teacher. On the other hand, a pupil whose advanced intellectual powers are condemned by lack of knowledge in certain directions or details to confine themselves to inadequate material and within a forcibly contracted scope, will lose interest and waste life, and will exercise by contagion a baneful influence even upon otherwise well-conditioned companions.

The teacher should follow her pupils at least through the phases of one circle and, if possible, through more circles than one. This avoids the friction of becoming acquainted with each other, and the consequent loss of energy and interest. Indeed, this is necessary in order to secure on the part of the teacher that interest in the

child as such, and on the part of the pupil that faith in the good will of the teacher, which are so essential to success.

In settling upon suitable methods of teaching the arts of reading and writing, it should be kept in mind that reading and writing do not constitute language, but only those phases thereof, respectively, in which expressions in language are fixed in symbols for an indefinite period, or in which expressions so fixed are deciphered for purposes of pleasure and profit. Reading and writing should at all times be so managed that the child may make full use of all it learns for the purposes of its life in and out of school. The matter should be kept within the scope of the child's powers of understanding and appreciation, and should be presented in a shape that will provoke the child's self-active efforts in the use and practice of these arts.

Here, as elsewhere, the necessary simple cognitions should be obtained from a concrete outer complexity, by processes of analysis; and all elements thus gained should be successively verified and fixed by varied use in all-sided synthesis. Strictly, therefore, the teacher should begin with suitable sentences, from which the child obtains by analysis certain words, which may be used in new combinations for a variety of purposes. From these words it descends by new analysis to more or less complex combinations of sounds and, ultimately to simple sounds, and uses these again in word-building. However, it is perfectly safe, in most cases, to begin at once with the analysis of words, inasmuch as the child usually reaches the word-stage before entering school, even if it has not had the benefit of the kindergarten.

The words for the first teaching should be selected from the child's experience and conversational vocabulary, so that they may be to the child genuine symbols of ideas of

actual things, and not mere arbitrary combinations of sounds. These words should be simple, too, in form and sound, easily recognized and readily used in plain statements by the child, conditions that are fulfilled by monosyllables that embody short vowel-sounds. The child may be interested in a number of these by short stories, conversations and pictures, e. g., — *dog, rat, trap, cat, fish, net, pot, pin*, etc; *wet, fat, black, hot, thin*, etc; *can, run, swim, purr*, etc. To these should be added in the first or second exercise, a few such words as, — *the, is, in, my*; and the child is ready for sentence-building to a limited extent. It may form sentences such as, — the dog can run, the cat is fat, the rat can run, the rat is in the trap, the fish is in the net, the pot is hot, my dog is thin, etc., in a variety of speaking and writing games in which the teacher gives some portion of a statement which the pupil completes, and *vice versa*.

Experience shows that the child has little difficulty and is much interested in writing these words and sentences in legible script from the very outset. On the other hand, the practice of printing involves a serious loss of time, inasmuch as it teaches something which under ordinary circumstances, the child must unlearn again. For similar reasons capital letters should be correctly used from the very beginning.

In a short time, the words thus used become in their turn objects of interest and thought, and, consequently, of analysis. This may be hastened by exercises in which words of similar sound are arranged in sets, orally and in writing, e. g.:

dog	cat	fish	net	pot	can	
hog	hat	dish	wet	hot	man	etc
log	fat	wish	pet	dot	pan	

From such sets, by proper treatment, the child will obtain, more or less complex sound-elements, like *og*, *at*, *ish*, *et*, *ot*, etc.; and simple consonant elements like *d*, *l*, *h*, etc. These consonant elements may be kept before the child, on some convenient part of the blackboard, in suitable arrangement, — *b*, *c* (*k*), *d*, *f*, *g*, *h*, etc. The child will, then, enjoy games in word-building, by uniting the complex sound-elements with the consonant elements and making "words that have a meaning." Thus *og* will yield *bog*, *dog*, *fog*, *hog*, *log*; *at* will furnish *bat*, *cat*, *fat*, *hat*, *mat*, *pat*, *rat*, *sat*, *vat*, *that*, *chat*; *an* will lead to *can*, *fan*, *man*, *pan*, *ran*, *tan*, *van*, *than*, etc. In all cases the child should prove its findings by embodying the words in suitable sentences, in exercises involving both speaking and writing.

By subsequent analytical processes the complex elements yield their simpler constituents: *og*, *at*, *ish*, *an*, etc., reveal themselves respectively as *o-g*, *a-t*, *i-sh*, *a-n*, etc.; and these furnish the material with which the child, at the hand of properly arranged synthetical processes, may rise to whatever complexity the language affords.

It might be shown now how the regular long vowel-sounds are discovered, and how so-called irregular spellings may be fixed in contrast games, involving sets of words like the following :

mat — mate	male — mail
hat — hate	sale — sail
man — mane	tale — tail
can — cane	see — sea
pan — pane	feet — feat
fin — fine	meet — meat
pin — pine	reed — read
etc.	etc.

It might be further shown, how in a different direction, words may be contrasted or grouped according to their meanings or their places in speech, involving a multitude of exercises similar to the following:

- | | |
|------------------------------------------|-----------------------------------------|
| 1. good – bad | 2. up – down |
| high – low | in – out |
| light – dark | above – below |
| straight – curved | before – behind |
| 3. good – goodness | 4. slow – slowly |
| great – greatness | great – greatly |
| dark – darkness | quiet – quietly |
| quick – quickness | sweet – sweetly |
| 5. snow – white | 6. dog – barks |
| coal – black | cat – mews |
| fire – hot | horse – runs |
| 7. bake – baker | 8. tastes { sweet |
| | sour |
| read – reader | runs { fast |
| | slow |
| write – writer | looks { young |
| | old |
| 9. animal }
faithful } dog
barks } | 10. fruit }
yellow } lemon
sour } |

It will be seen that these suggestions, collectively and separately, satisfy in every particular the requirements indicated on page 23. There is throughout the upward tendency from the concrete to the abstract, from particulars to the general, from the actual to the possible, from the outer to the inner, from experience to principle, from facts to law, from the complexity of things to the simplic-

ity of thought. They deal throughout with material which the child is supposed to control fully; and all it learns it can at once apply to the purposes of its life, in arranging and sifting whatever knowledge it has, as well as in communication with others in written and spoken language.

Among the many exercises that may be invented in this direction, I call attention to the use which the child may make of its skill in reading and writing, in labeling the collections it may be induced to make, collections of leaves, of metals, of stones, of kinds of wood, of flower-names, of names of animals, of simple conception-drawings, of observations on the weather, etc., as indicated on page 29, etc. The details of all this, however, and of other applications not mentioned here, must be left to the tact of the teacher who has entered fully into the spirit of psychological laws, and who has the courage to let the children grow.

As soon as the child has acquired a tolerable control of the principal sounds and letters in script, certainly as soon as it has accomplished the work indicated on page 35, the child may be introduced to the printed letters. These are sufficiently like the script letters to recall them in the child's mind almost at first sight, more especially if they appear on suitable printed cards in combinations or words with which the child is familiar. Loose sheets, small hand charts, little books, containing very short stories, incidents, anecdotes, riddles, concise descriptive statements concerning plants, animals, and other objects of interest, and as soon as possible, suitable "story-books," books of travel, and books of reference should be provided, so that the child may learn to turn to the printed page, from the very start, for legitimate purposes of pleasure and instruction.

Henceforth, there should be a steady advance in all

directions. In gradual, continuous progress the pupil should be led, though always in accordance with the principles enounced at the outset, to a genuine, self-active appreciation of the science and art garnered in the printed page. There should be exercises in which the pupil acquires interest and skill in culling knowledge from books, and others in which he may kindle his own enthusiasm for the Beautiful, the True, and the Good, at the immortal fires that burn in treasures of literature ; exercises in which he records concisely and systematically the results of his own observation and experience, and others in which he learns to reproduce in beautiful, living speech, for the enjoyment and edification of others, the words that glowed in the innermost heart of a Past, as well as the emotions that tremble in his own breast.

In the selection of material for these purposes it should be remembered, however, that these exercises, like all others in which the pupil engages, should take the keynote, not from the possibilities of the subject, but from the actualities and possibilities of the pupil's mental development at the respective stage. To force or induce a pupil to memorize formulas of knowledge beyond his ken, or to reproduce in outer semblance, emotions he cannot appreciate, breeds hopeless self-conceit and hypocrisy, blunts and vitiates, or, even, destroys in his spirit all that is meant to raise him to his destiny. On the other hand, if the material is presented to the pupil, at successive stages, in forms at which he can aim with reasonable hope of success, in the exercise of his productive activity, he will in due time attain an all-sided mastery of the arts involved, commensurate with his powers, and adequate to the purposes and aims of his life.

The question of disciplinary regulations runs through every phase of school-work, and is, consequently, of the greatest importance. Discipline is concerned more or less directly with the morals of the pupil. It begins when the child begins to become more or less consciously a part of some social organism, and its general aim is the introduction of the child into these organisms. It would make the child an integral part of the organisms in question, without impairing his individual interest and his personal liberty; or, rather, it would direct the development of the child's individual interests and personal aspirations, in harmony with the welfare of the social organism.

In the family, the common interests center largely in the growing individuality of the child, in whom the family sees the promise of its perpetuation. Here the child is introduced, as it were, to itself; here it discovers and exercises its powers with almost exclusive reference to the pleasures of activity. During the first years of the child's life, at least, the disciplinary activity of the family is chiefly yielding, provident, protecting, mostly confined to the adjustment of surroundings with reference to the child's needs and wants. This remains as the prevailing characteristic of the ideal family throughout the child's life, and the adult child returns to the bosom of his father's house with a sense of trust and security which he can find in no other place, not even in the house founded by himself.

In the kindergarten, the child is introduced to its equals; and, while the development of individual powers still receives a very large share of attention, the surroundings are so adjusted that the child meets in the exercise of its individual powers, at every step, the need of help from its play-fellows and the opportunity of giving help to them. The activities and aspirations, suggested by the surround-

ings, constantly point to the value of common effort, of co-operation. The successes and pleasures this society brings, are so much greater and more intense than those to which it can aspire single-handed, that there is born in the child's heart a sense of gratitude which is none the less real because it is selfish, a love which is none the less intense because it springs from self-love. In due time the child overlooks the pleasurable reactions of giving pleasure and of helping, and begins to find a genuine delight in helpfulness and sympathy for their own sake; and love whose roots are far down in the dark soil of selfishness, begins to put out beneficent leaves and blossoms in the bright atmosphere of a generous good-will.

In the school, the chief aim of disciplinary regulations is to raise this generous good-will into an abiding sense of duty or obligation, and to bring the conduct under the conscious control of this sense. Here the child should learn to submit cheerfully to unwelcome restraints and to engage with alacrity in laborious pursuits for the sake of needed results. In a measure the family and, more particularly, the kindergarten have prepared the child for this important discipline, in leading the child from *play* for immediate gratification to *work* for the attainment of remote ends, very much simplifying the work of the school, wherever such ideal relations exist. Practically, however, very few children pass through the kindergarten, and the school is compelled to do, as well as it can, much of the work properly belonging to an earlier period, or to labor under the many trying disadvantages that result from a neglect to establish a solid foundation of good-will.

The proximate end of discipline is automatic good conduct,—good habits; its proudest outcome is a well-regulated will. It appeals, particularly during the earlier periods of

the child's life, much to the emotional side of mental life. During the first period, it wins through pleasurable sensations, by means of which it leads and holds the child's attention to whatever it deems proper. To these it adds, at a later period, the skillful creation of desires, which by equally skillful gratification, it raises to forms akin to an intelligent interest. The school seeks to render this interest abiding and conscious, by a prudent use of pleasurable sensations and of the creation and gratification of desires in connection with the special forms of thought and action with which it is concerned, appealing, however, more and more to the intellect and the reason, through which alone the will can be reached. (p. 18.)

Generally speaking, the discipline of a school will be good in proportion to the interest it may have called forth on the part of the pupil, in its work. Without such interest success is impossible. Stagnation, retrogression, disintegration will surely follow its abatement or loss. On the other hand, this interest will render it a comparatively easy matter to secure the neatness, accuracy, persistence, consciousness, regard for fellow-students, and teachers, respect for the school, and obedience to its minor regulations that are so necessary to the success of the school. Indeed, sweetness of temper, firmness of character, learning, skill, enthusiasm, and other qualities of the teacher owe their value chiefly to their power in eliciting, satisfying, and holding interest.

Whatever brings joy to the child's heart, a pleasing sensation, the gratification of a harmless desire, the innocent exercise of the sense of power; whatever makes life brighter and fuller, whatever makes existence worth more to the child, will be sure to call forth this interest. Whatever the child can use for the purposes of its life, will call forth this interest.

It is, then, in this respect, the business of the school to adjust surroundings so that the child may have ample opportunities to form and attain worthy purposes, so that all it sees and does may strengthen these purposes and raise them to higher planes, liberating the child more and more from the need of guidance, and making it more and more the conscious architect of its own fortune.

The details of this work should be arranged and managed with constant reference to the criteria, indicated on pp. 18-20.

However, the ideal conditions that would render possible a school-discipline, based wholly on interest in the work of the school and on a well-regulated activity of the pupils, are, perhaps, unattainable in practice. The imperfections of the teacher and of the school, the shortcomings of the home and of the kindergarten, the evil effects of uncontrolled associations, and, not unfrequently, of heredity, give rise to a host of unforeseen and unavoidable evils which call for more or less artificial treatment, for the introduction of motives foreign to the work of the school, and for more or less direct compulsion through fear of punishment, dread of authority, or hope of reward.

If these compulsory means of discipline are used humbly, for what they are worth, with the constant prayer for the removal of the shortcomings that render them unavoidable, they will frequently accomplish much good, but in the hands of pride or self-conceit they do incalculable harm.

The most pernicious of these is censure mingled with words of contempt or derision. In the first place, the child deserves, even at the worst, compassion and helpful advice, rather than scorn; and then, these words sink deep into the hearts of the children with meanings they were not intended to have, embittering and warping the disposition

more permanently than even unjust chastisement with the rod.

Even gentler forms of censure have their dangers, inasmuch as they involve an arraignment of motives. The child so often does wrong through ignorance or lack of judgment, with the best of motives, and it needs in these cases instruction and advice, but not blame.

However, under all circumstances, practical as well as ideal, the strongest allies of good discipline are good habits, and these can be secured only at the expense of constant watchfulness. The child must be carefully guarded against opportunities or temptations to do wrong, for every such opportunity or temptation retards the formation of a good habit, or weakens a good habit already formed. During a long period, the child does indifferently right or wrong, merely intent on doing something; but what it does plants a tendency in its mind, which requires only a few similar opportunities to become an eager desire, and, ultimately, to settle into a fixed habit. All that might give rise to such tendencies should be carefully excluded from the child's presence, while opportunities for harmless or beneficent all-sided activity should be plentifully supplied. Thus, in due time, good habits may ripen into firmness of character which is proof against temptation from inherent vigor for good.

